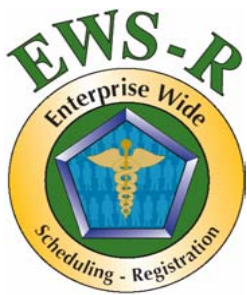


# Enterprise Wide Scheduling and Registration (EWS-R) Industry Day



6 February 2003  
Skyline Theater  
Falls Church Virginia





# Introduction Of Participants



- LTC Paul Michaels – Contracting Officer, DCC-W
- Captain Ben Long –Program Manager, Resources Information Technology Program Office, TMA
- Mike Snyder – Principal Deputy PM, RITPO
- Evan Williams – Director, Scheduling and Staffing Solutions, RITPO



# Agenda



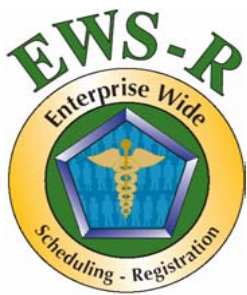
- Who is DCC-W?
- Purpose of Industry Day
  - Disclaimer
  - Ground Rules
- Goals of Acquisition
- Proposal Evaluation Process
- MHS and RITPO Overview
- DoD – VA Information Systems
- Overview of Systems Integration for EWS-R
- Question and answers



# Who is DCC-W?

- Founded in 1884 as The Supply Division of the War Department.
- Became a civilian-control led entity in 1889.
- In 1968, DCC-W issued a solicitation for development of a system that is known today as the Internet.
- DCC-W was formerly known as the Defense Supply Services – Washington (DSS-W)
- Five Contracting Business Units (CBU); CBU 4, Health Affairs managing this procurement





# DCC-W Mission and Vision



## Mission:

- Provide contracting support to all defense customers to help them achieve their mission.

## Vision:

- Be the indisputable and recognized leader in quality government contracting services:
  - Exceed customer expectations
  - Partner in customers success
  - Promote innovative thinking
  - Challenge employees to stretch their horizons
- Customers will choose DCC-W because we value their business



# Purpose Of Industry Day



- Inform Industry of the plan for Acquisition of the COTS solution for EWS-R
- Provide guidance to industry in responding to the RFP
- Introduce the MHS information environment for EWS-R integration
- Introduce the Project team, MHS Program management, and the key acquisition points of contact



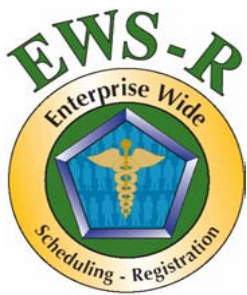
# Disclaimer

- This session is for background information purposes only
- The Government reserves the unilateral right to make changes in requirement or acquisition plan
- The formal RFP takes precedence over information discussed today



# Ground Rules

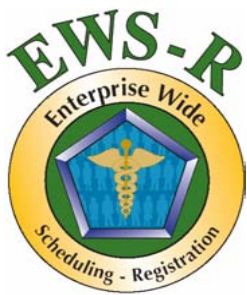
- Questions are to be submitted in writing electronically (including questions asked orally at this Industry Day)
- E-mail questions to [ews@tma.osd.mil](mailto:ews@tma.osd.mil)
- Answers given at this Industry Day are not binding
- Official record of questions/answers is the Website
  - Website:
    - [www.ritpo.ha.osd.mil](http://www.ritpo.ha.osd.mil)



# Goals of EWS-R Acquisition



- Acquisition of a COTS product and support which meets Enterprise Wide Scheduling and Registration technical and functional requirements to be integrated into the MHS
- Acquisition of an Enterprise License to the COTS solution for configuration, interface development and integration support, with options to be exercised upon successful demonstration and interoperability testing for MHS system-wide deployment



# Proposal Evaluation Process



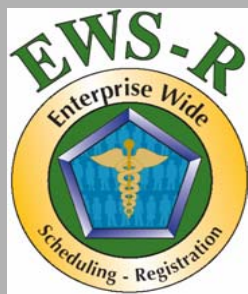
- Government will convene a SSEB.
- SSEB will evaluate proposals to determine those within the competitive range.
- Those vendors within the competitive range may be requested to provide an oral presentation or a demonstration
- Final award will be made to the vendors that provides a comprehensive best value solution to the requirements in the RFP.



# MHS, RITPO and EWS-R







# Current MHS IM/IT Governance



## IM (Functional Management)

## IT (Program Management)

Assistant Secretary of Defense  
(Health Affairs)

TRICARE  
Executive Committee (09/SES)

Information Management (IM)  
Proponent Committee (08/SES)

Theater Functional (IM)  
Steering Committee (07/08)

Information Technology (IT)  
Program Review Board (06/SES)

eBusiness, Policy &  
Standards

MHS/IMT&R  
Chief Information Officer

Program Executive Officer  
MHS IT Organization

Director,  
Information Management

MHS EA Board  
Chief Architect

Access to Care  
Provision of Health Svcs  
Manage the Business  
Pop Health Mgt

Clinical IT Program Office

Resources IT Program Office

Executive Info/Decision Spt  
Program Office

Tri-Svc Infrastructure  
Management Program Office

Defense Medical Logistics  
Standard Support

Theatre Medical Info Prog

Advanced Technology  
Innovation Center

Medical Readiness





# RITPO Operational Continuum





# Project Concept

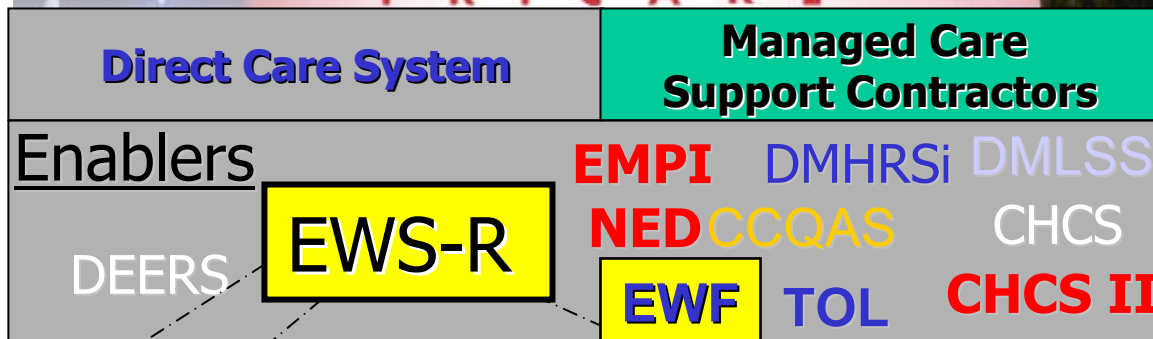
- Acquire a solution that delivers the MHS requirements for appointing, scheduling, Operating Room scheduling and fully integrated registration
- Develop interfaces and integrate EWS-R COTS to MHS source systems
- Replace CHCS Legacy Scheduling and Registration with EWS-R COTS Package
- EWS-R becomes MHS appointing, scheduling, registration and operating room scheduling capability



# Enterprise Wide Scheduling



## Delivering Access to Care

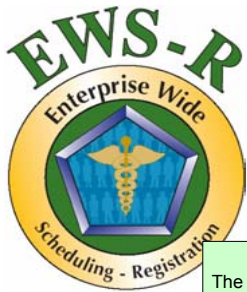




# EWS-R RFP



- The RFP contains the detailed requirements for the EWS-R functionality
- The technical questionnaire provides the respondents the opportunity to describe the technical details of their solution
- The following slide from the RFP provides a high-level view of EWS-R relationships to other MHS information systems

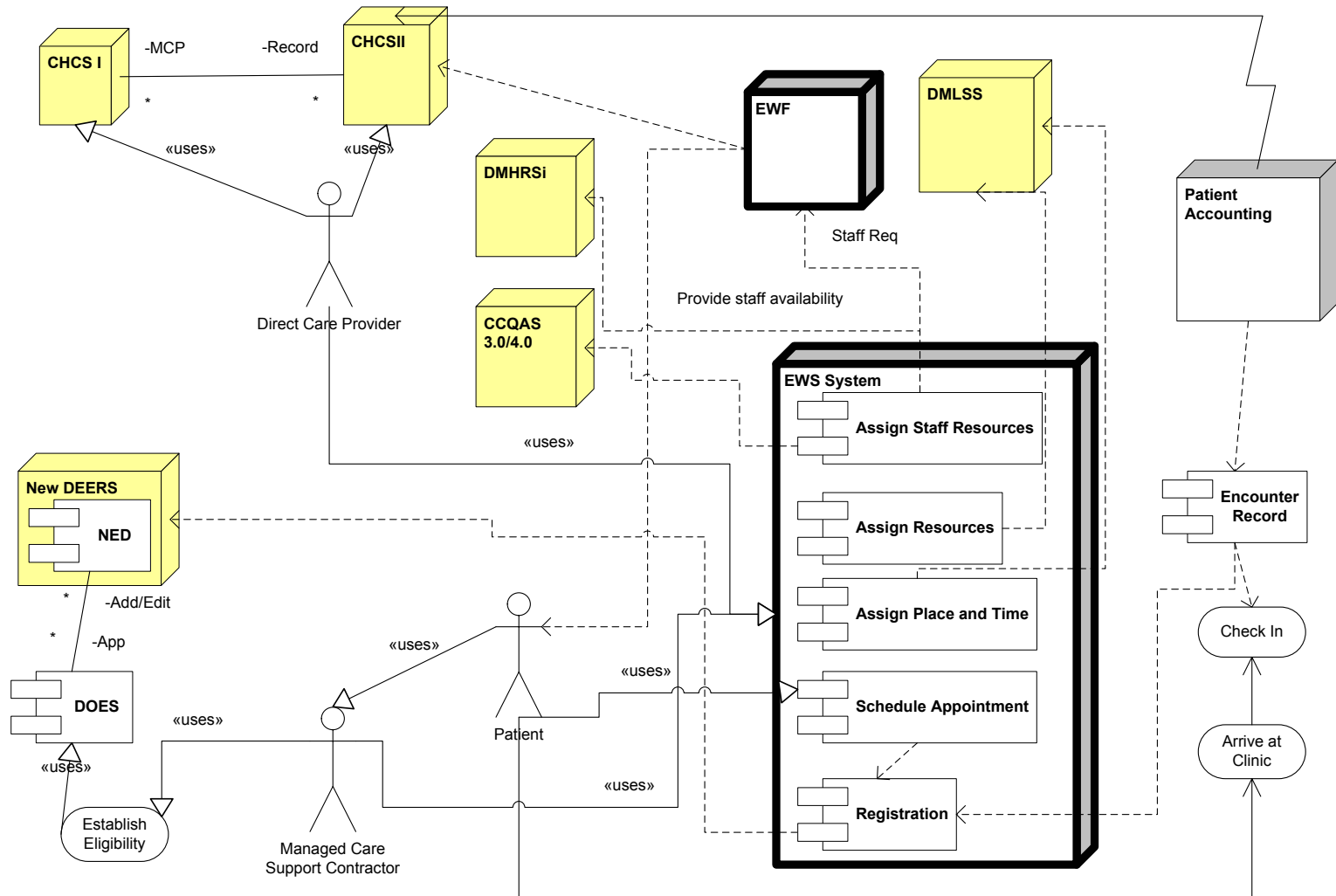


# System View

Draft Deployment/Component/Use Case



The TOL System will be the portal for patient and provider web access to the appointing and scheduling solution





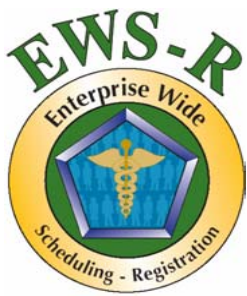
# Military Health System

## Background Statistics



- 8.7 Million Eligible Beneficiaries
- ~45 million ambulatory encounters per yr
- 131,000 Military Health System Personnel
- 76 Hospitals
- 460 Medical Clinics
- 417 Dental Clinics (most are co-located with MTFs)



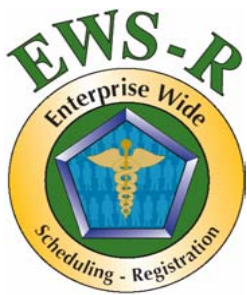


# Military Health System

## Weekly Statistics



- 898,000 Outpatient Visits
- 1,000,000 Prescription Fills
- 485,000 Telephone Calls
- 10,000 Admissions
- Over 81,500 Inpatient Medication Orders
- Over 28,800 IV Medication Orders



# Definition of Success

1. Fair, full and open competition for acquisition of best value COTS product
2. Technical and functional requirements met
3. Integrated fully to MHS information systems
4. Implementation synchronized and sequenced to MHS IM/IT strategy

# DoD - VA

## Interoperability and Access





# DoD - VA Interoperability



## CONTRACT CLAUSE IN RFP (p.16)

- C.7. Specific Tasks:
  - C.7.1. (Item) 3. The Vendor shall support the government in providing the Veteran's Administration (VA) Outpatient Scheduling development contractor the necessary information to ensure interoperability between the two scheduling solutions.
- Interoperability is the ability of the systems to provide data, information, and services to and accept the same from each other, and to use the data, information, and services so exchanged to enable them to operate effectively together. It is anticipated that, at a minimum, quarterly design reviews will be required between the DoD and the VA to manage this process and that the Vendor would participate in these reviews.
- The necessary information to be shared may include documentation, data structures, data dictionaries, processes, application programming interfaces (APIs), product architecture, communication methods, and relevant design and development methodologies but not the source code of the COTS application.
- Deliverable 3, above, would be included as part of the shared information. A Scheduling Application Integration Plan (Deliverable 4) shall detail how the Vendor will support the interoperability of these two scheduling applications. Applicable elements of this plan will be incorporated into appropriate associated deliverables in an effort coordinated by the Government and the EWS-R integration contractor.



# DoD - VA Interoperability



## Option Clause in RFP (p.25)

- C.11.3. Additional Information The Government may consider making the COTS Enterprise License solution selected, without configuration or interfacing, available to the Veteran's Administration and other interested Federal Agencies engaged in Healthcare. The purpose of this additional information is to provide a means of access to the selected COTS solution or its components by other Federal Agencies. There is no expectation of pricing information or Level of Effort from the responding organizations for the purposes of the Request for Proposals.

# Overviews of Systems and Integration for EWS-R

Note: We will not entertain questions from the audience during the presentation of these systems overviews

Questions should be posted to:

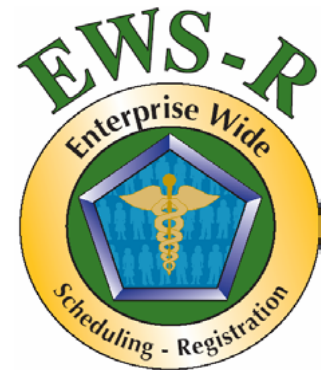
[EWS@tma.osd.mil](mailto:EWS@tma.osd.mil)

Thank you





# MHS Enterprise Architecture Overview







MHS IM/IT  
Program



# *Using Enterprise Architecture To Improve Healthcare Delivery and Build Better Information Systems*

CAPT Brian Kelly MC USN  
MHS Chief Architect  
Director, E-Business, Policy & Standards  
TRICARE Management Activity  
[Brian.Kelly@tma.osd.mil](mailto:Brian.Kelly@tma.osd.mil)



# MHS Enterprise Architecture Strategy

## **Operational Architecture eBPS**

- Access to Care
- Provision of Health Services
- Managing the Business
- Population Health Management

## **Systems Architecture PEO**

- Theater Medical Information Technology
- Clinical Information Technology
- Resource Information Technology
- Defense Medical Logistics Standard Support
- Executive Information/Decision Support
- Computer & Communications Infrastructure

## **Technical Architecture TMI&S**

Joint Technical Architecture (JTA)

- XML
- ANSI X.12
- Health Level 7

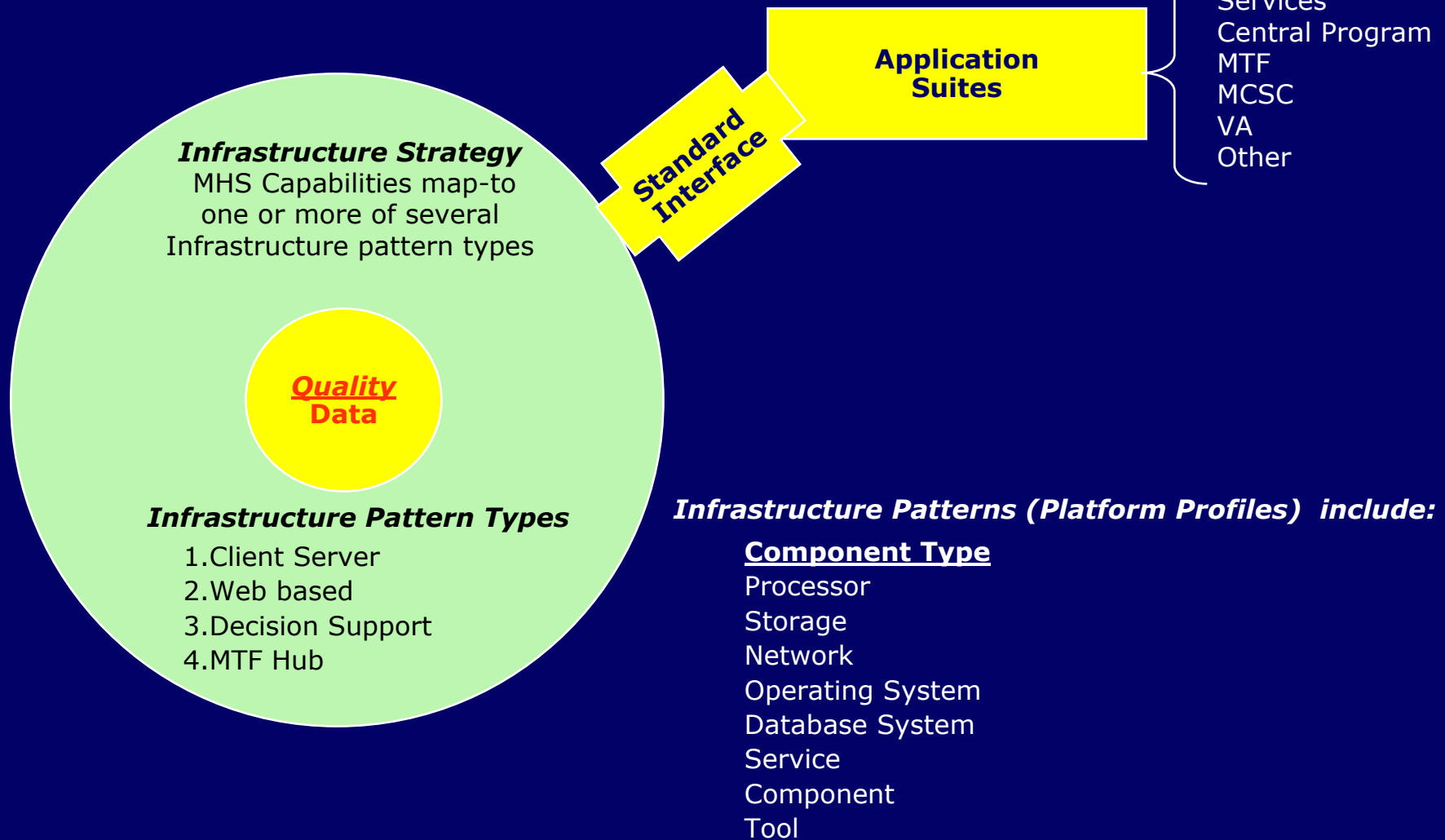


# MHS Enterprise Architecture Demo

<http://www.tricare.osd.mil/architecture>



# MHS Common Operating Environment Concept



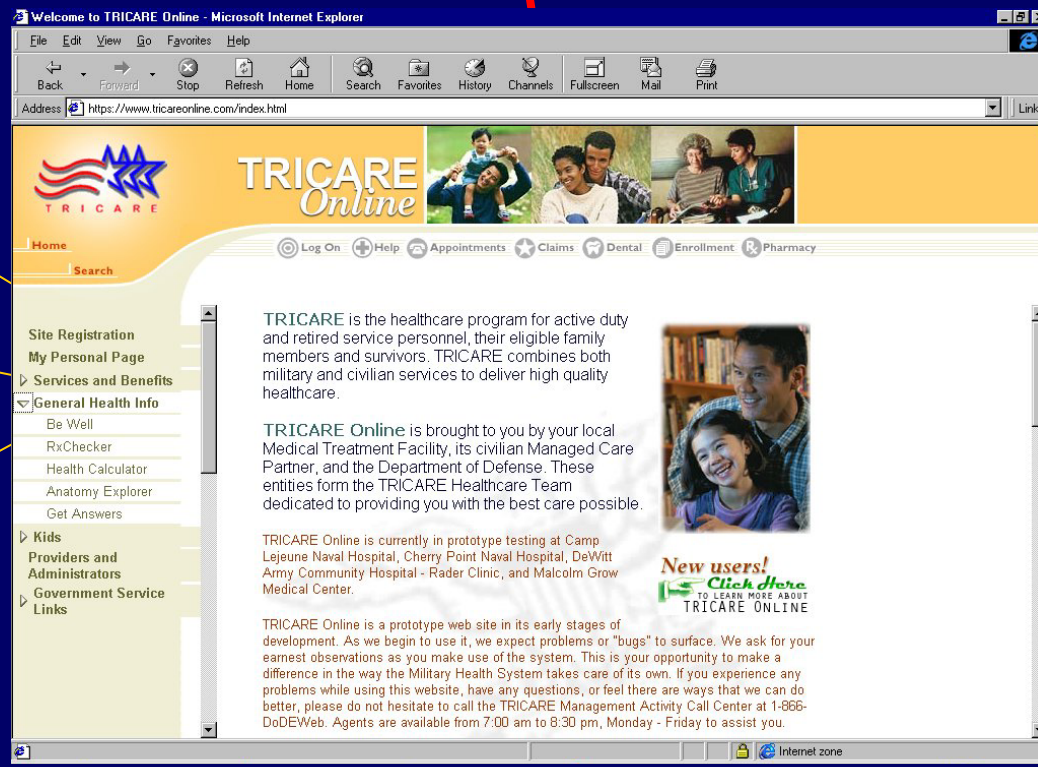
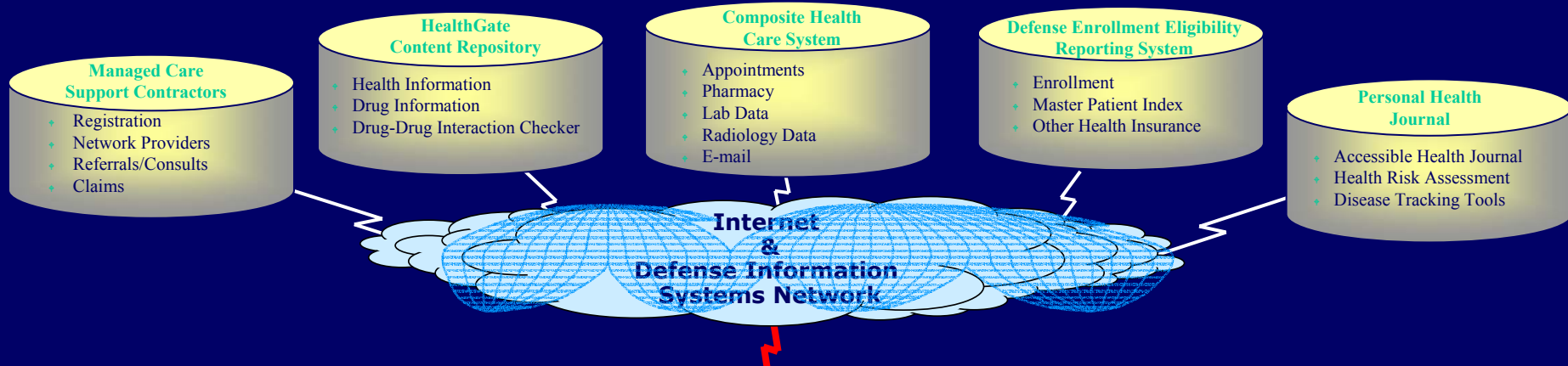


# MHS Computing and Communications Infrastructure Patterns -- Findings

- Web Services Pattern
- Client Server Pattern
- Decision Support Pattern
- Medical Treatment Facility (MTF) Hub Pattern



# TRICARE Online - Secure Portal to MHS Resources and Services





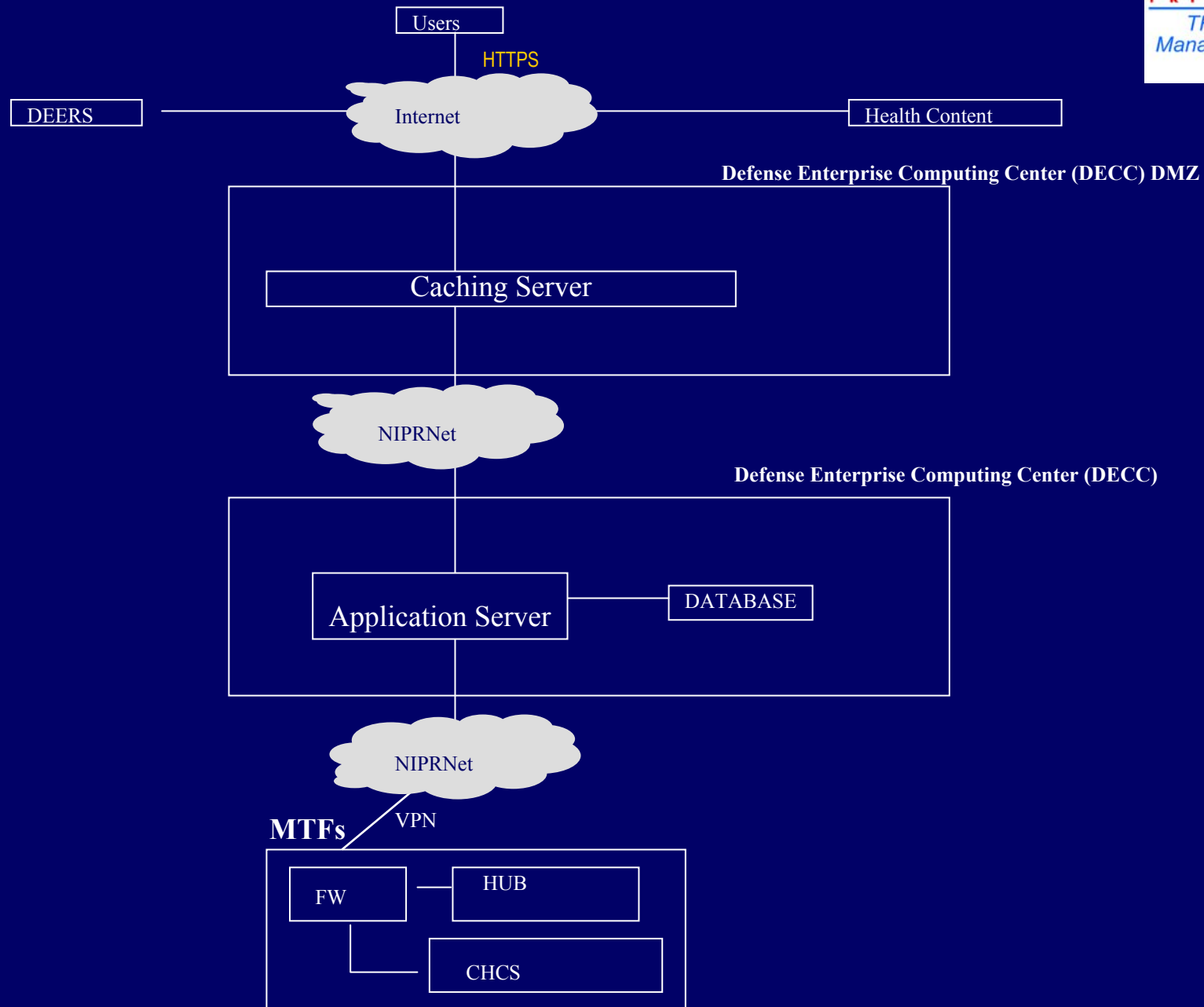
# TOL – Securely Connecting the MHS







# TOL Platform Architecture





# The Two Components of TOL

- TOL Defense Enterprise Computing Center (DECC)
  - Open Standards (J2EE) portal
  - Any application wrote to J2EE specifications described in the TOL Application Integration Guide can be easily integrated on TOL with no additional hardware and no new DITSCAP requirement
  - Applications can be displayed based on Roles (Segmentation possible by Service, specialty, etc.)
- The MTF Hub Piece
  - Allows secure communication with TOL DISA
  - TOL deals with all the Service Firewall and Security Accreditation Issues
  - Allows local caching and improved performance of web-based applications



# *R&A Purpose*

To standardize R&A business rules/functional requirements to enhance timeliness, effectiveness and efficiency of the delivery of health care services to MHS beneficiaries.

## *Mission*

To provide the MHS a single resource for HIPAA-compliant referral and authorization processing

## *Vision*

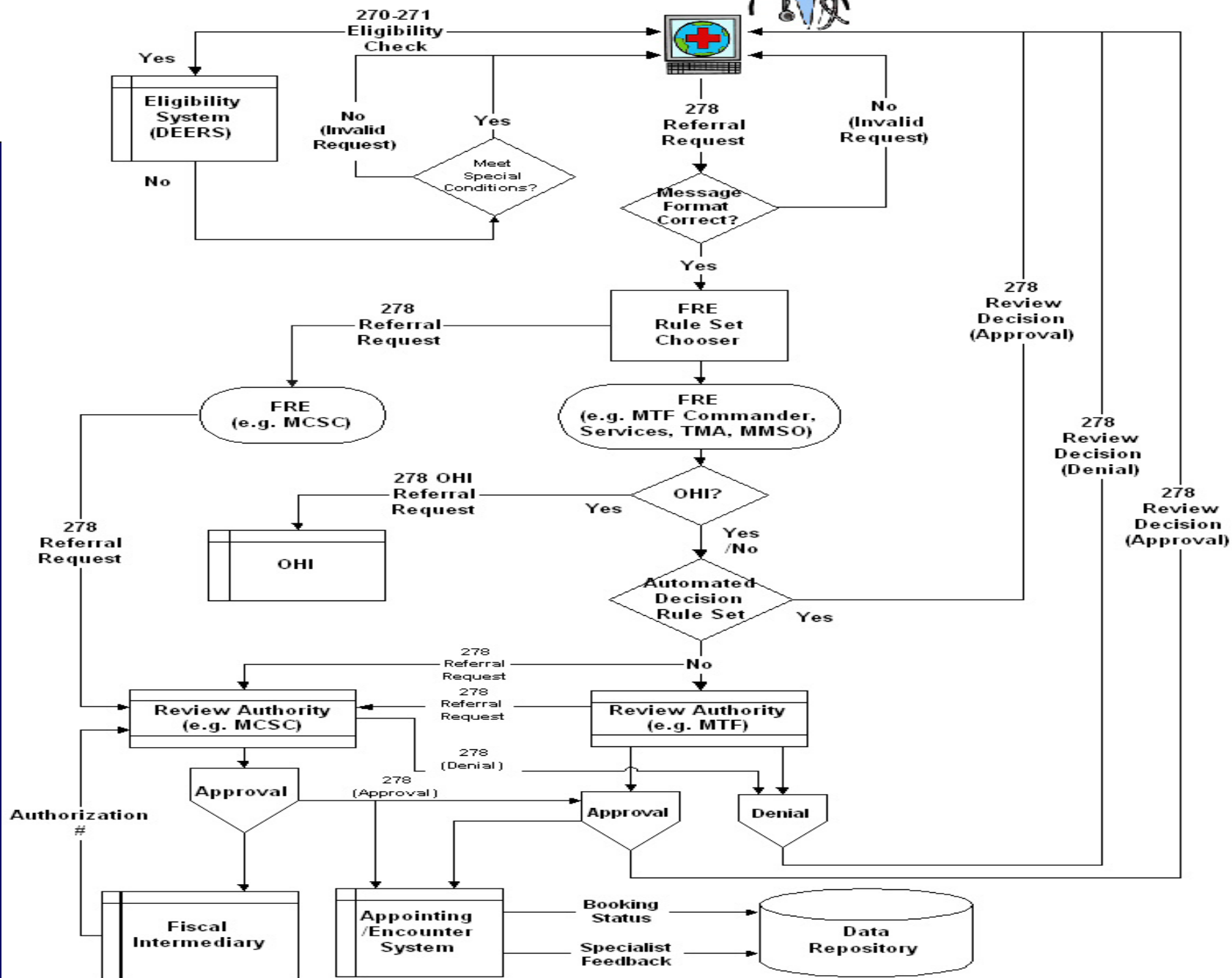
To serve as the common R&A solution that will be deployed worldwide and will enhance the MHS ability to deliver quality, cost-effective health care in a timely manner.



# MHS Enterprise Referral & Authorization Process



Requester





Break

Please Return in 15 Minutes

# CHCS and CHCS II Integration Overview





# CHCS II Briefing

*LTC(P) Bart Harmon MD, MPH*  
*Chief Information Manager for Provision of*  
*Care*  
*OSD(HA) IMT&R/IM*



# ***Military Health System Information Management/Information Technology Program Force Health Protection***



***MHS is dedicated to support Force Health Protection (FHP)***

- Healthy and Fit Force
- Casualty Prevention
- Casualty Care Management

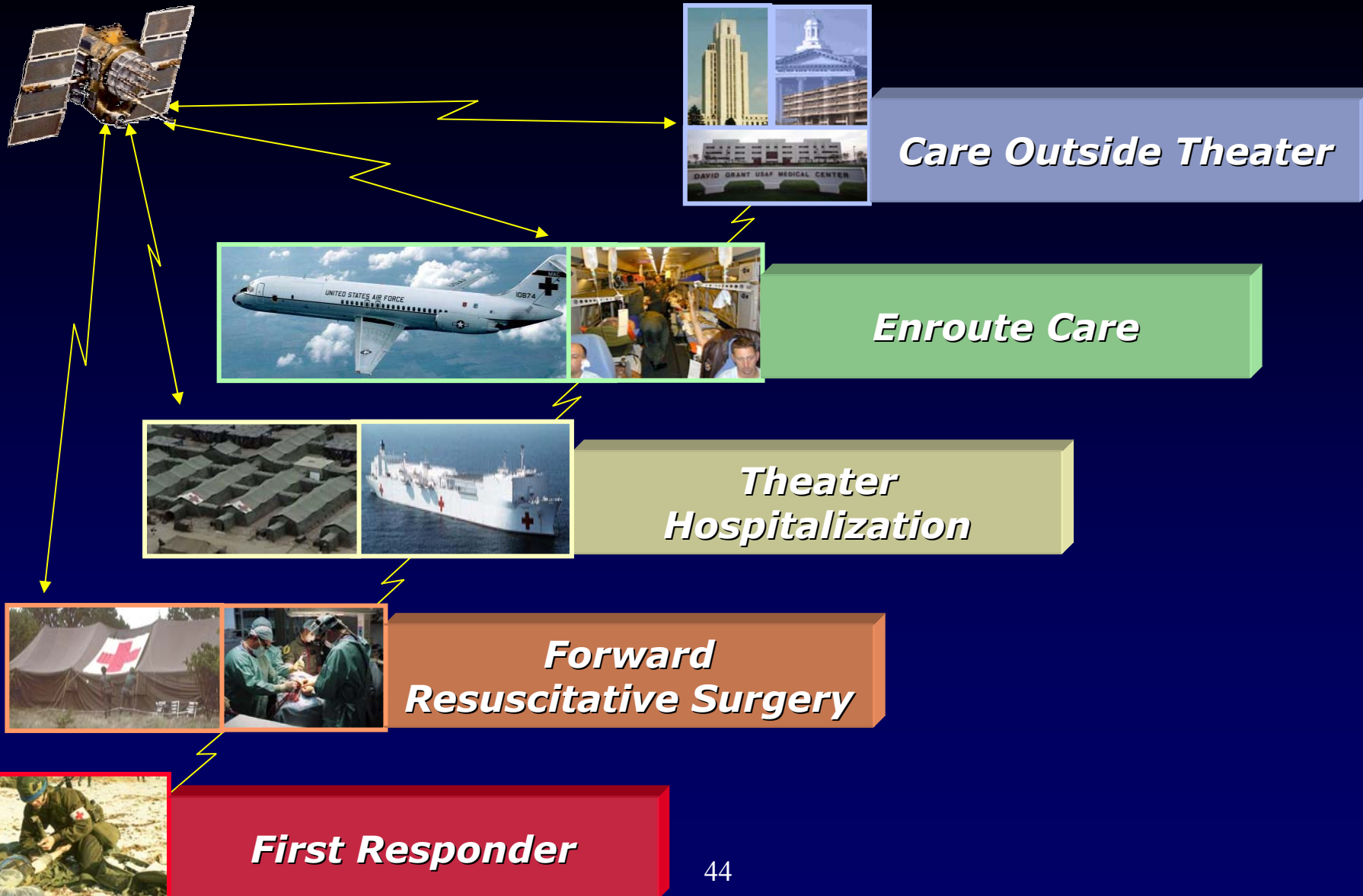
***FHP is much more than individual health care delivery:***

- Involves full spectrum of health services
- Medical Surveillance is a keystone to support FHP Pillars





# ***Military Health System Information Management/Information Technology Program Levels of Care***



# ***Military Health System Information Management/Information Technology Program***

## **Submit requirements to Joint Staff**

- Mission Needs Statement
- Capstone Requirements Document
- Operational Requirements Document

**JS, CINCS, Services, Agencies  
Review and Comment**

**O-6 Level**

**JS, CINCS, Services, Agencies  
Review and Comment**

**Flag Level**

**Joint Requirements  
Panel (JRP) Brief**



**Review**

**Joint Requirements  
Board (JRB) Brief**



**Review**

**Joint Requirements  
Oversight Council**



**Approve**

## **Joint Requirements Oversight Council (JROC) Requirements Approval Process**



# ***Military Health System Information Management/Information Technology Program Strategic Direction***

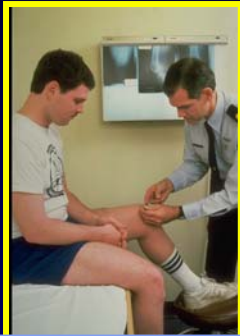
**Operational Continuum**

**Military  
Medical  
Readiness**

**Train As We Fight**

**Sustaining Base**

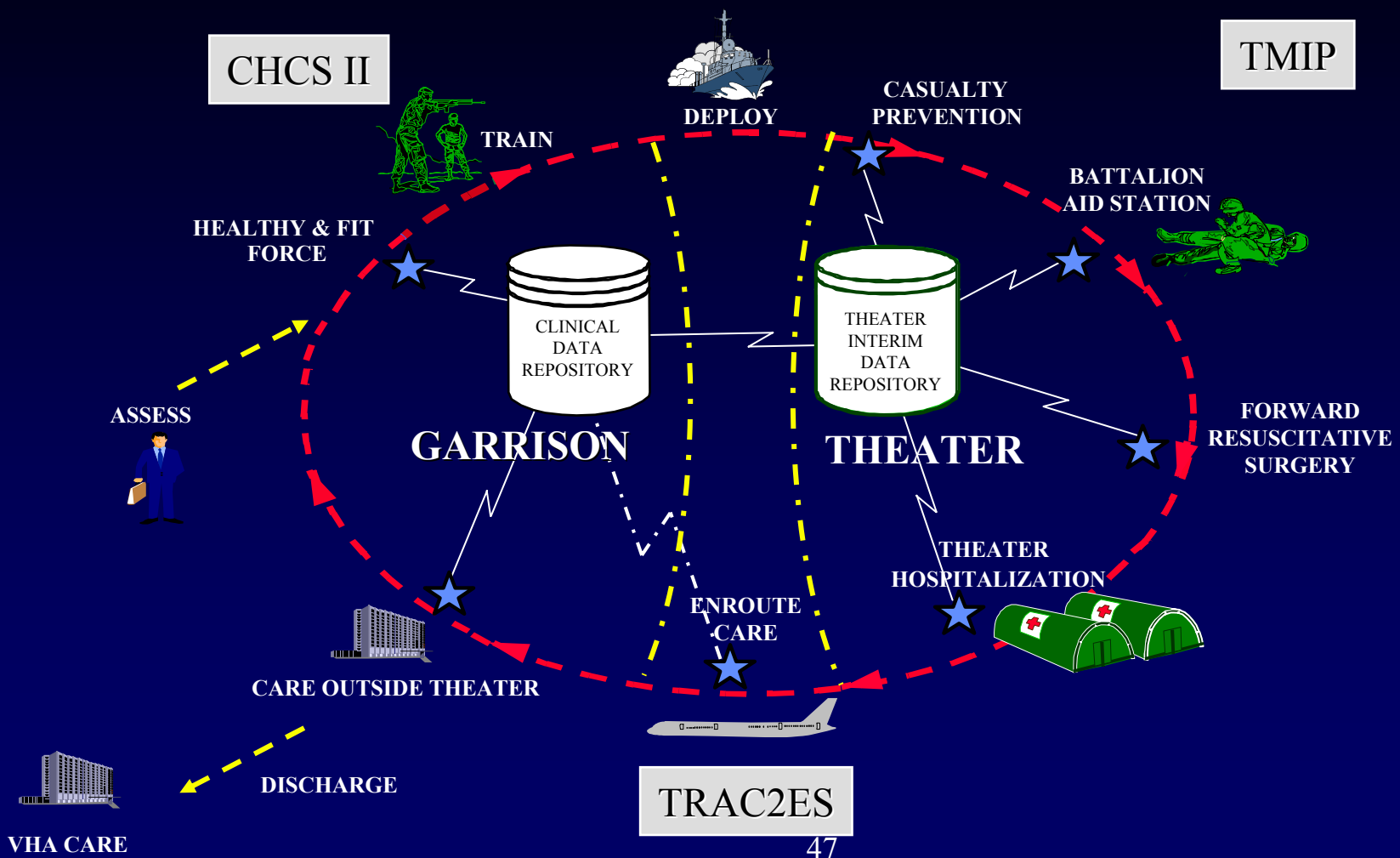
**Deployed Forces**



# *Military Health System*

## *Information Management/Information Technology Program*

### *Integrating the Health Record*

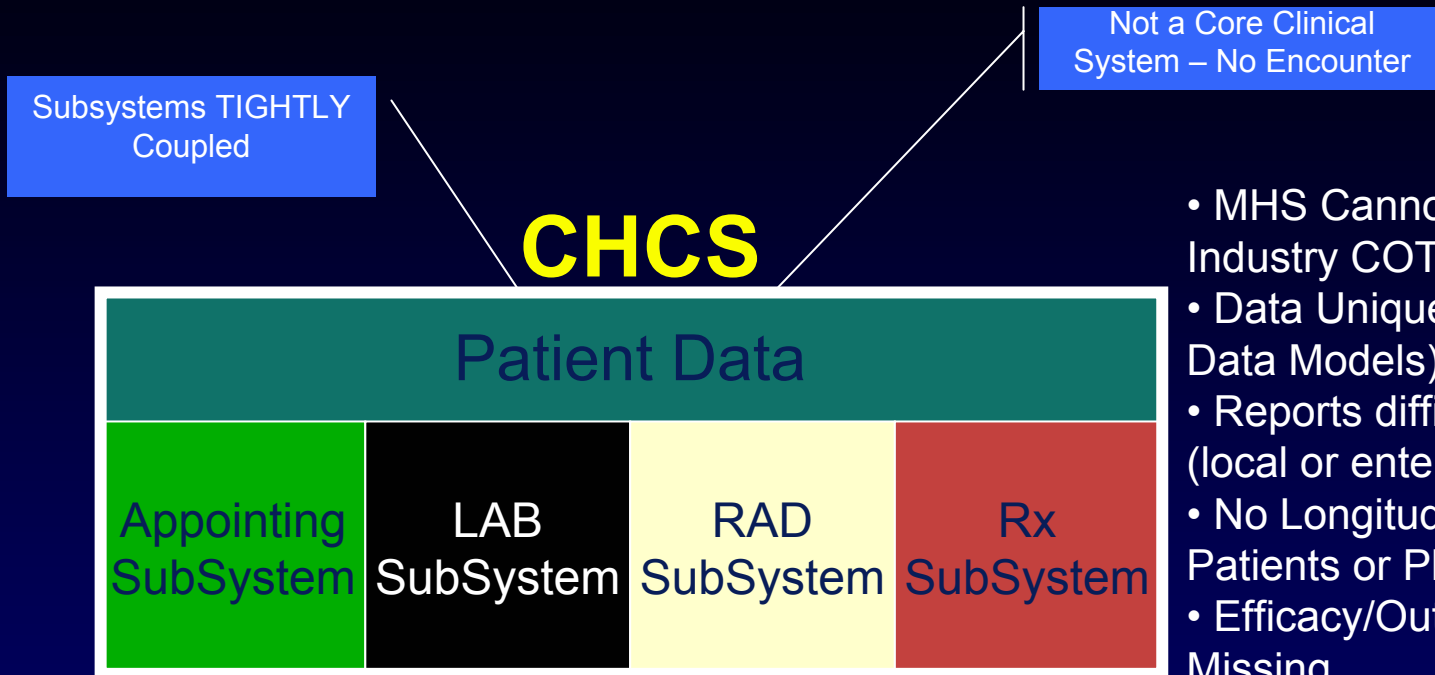




# ***Military Health System Information Management/Information Technology Program Patient Encounter Process***

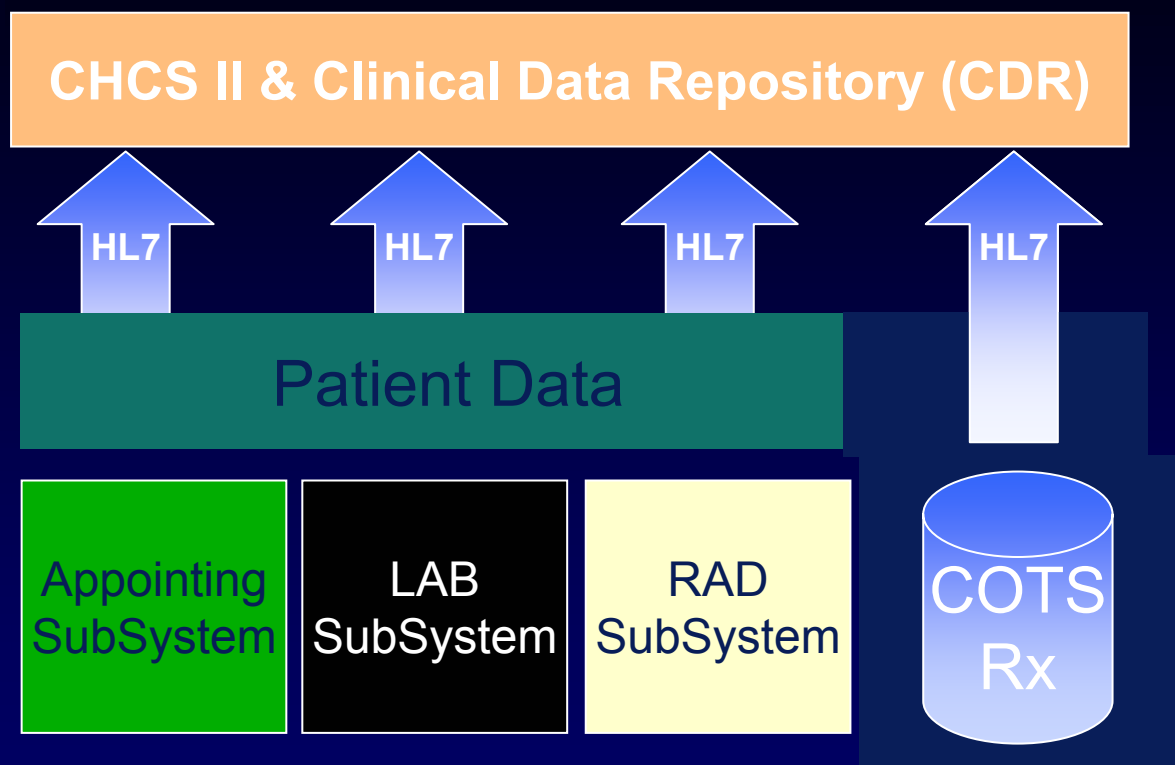


# MHS Issues with CHCS



- MHS Cannot Easily Leverage Industry COTS
- Data Unique To Each Site (104 Data Models)
- Reports difficult to generate (local or enterprise level)
- No Longitudinal View of Patients or Pharmacy Operations
- Efficacy/Outcomes Data Missing
- Very Costly/Time Consuming For Changes

# CHCS to CHCS II Migration Path



- CDR Now Collects All Patient Data Generated by CHCS as Well as Encounter Data

- Leverages 3M COTS Provided Interfaces To Be Able To Integrate Ancillary System (Lab, Radiology, Dictation Systems, Etc.)

CHCS





Any Status

## Appointments

ROBBINS, KENNETH K 20/100-10-7535 35yo M DOB:18 Jul 1965



Options

## Folder List

- Desktop
  - Alert Review
  - Appointments
  - Telephone Consults
  - Search
  - Patient List
  - Consults
  - New Results
  - Dental
  - Reports
  - Tools
  - Web Browser
  - CHCS-I
- ROBBINS, KENNETH K
  - Demographics
  - Health History
  - Lab
  - Radiology
  - Flowsheets
  - Current Encounter

Change Selections ...

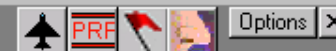
My Appointments in GENERAL MEDICINE CLINIC (BHAA) for 25 Jan 2001 .

Appt. Date/Time	Type	Patient	Status	Classification	Reason for Visit	FMP/SSN	Home Phone	Work Phone
25 Jan 2001 1201	WALK IN	ROBBINS, IAN I	CheckedIn	OutPatient	test	20/100107533	918 5550795	202 555948
25 Jan 2001 1211	WALK IN	ROBBINS, KENNETH K	CheckedIn	OutPatient	HTN F/U	20/100107535	918 5556734	202 555078



## Patient encounters

ROBBINS, KENNETH K 20/100-10-7535 35yo M DOB:18 Jul 1965



## Folder List

- Desktop
  - Alert Review
  - Appointments
  - Telephone Consults
  - Search
  - Patient List
  - Consults
  - New Results
  - Dental
  - Reports
  - Tools
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- ROBBINS, KENNETH K
  - Demographics
  - Health History
  - Lab
  - Radiology
  - Flowsheets
  - Current Encounter

Date: 25 Jan 2001 1212 EST

Status: **Checked-In**

MTF: NMC PORTSMOUTH

Primary Provider: DOCTOR, LAMP

Type: **WALK IN**Clinic: **PMT**

AutoCite...

**AutoCites** Refreshed by DOCTOR, LAMP @ 25 Jan 2001 1216 EST**Problems**

ALLERGIC RHINITIS  
ESSENTIAL HYPERTENSION BENIGN

**Medications**

Medication Name	Status	Sig	Refills	Last Filled
ACETAMINOPHEN (ACETAMINOPHEN), 325MG	Active	T2 TAB Q4 PRN PAIN #30 RF1	1	21 Jun 2001
HYDRODIURIL (HYDROCHLOROTHIAZIDE), 25MG	Expired	T 1 TAB PO QD #90 RF3	3	17 Mar 2000

**Allergies**

Iodine Containing Agents  
Sulfa-Drugs

Screening

Vitals

S/O

A/P

Disposition

AddNote



## Patient encounters

ROBBINS, KENNETH K 20/100-10-7535 35yo M DOB:18 Jul 1965



Options X

## Folder List X

- Desktop
  - Alert Review
  - Appointments
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  - Current Encounter

Reason For Visit

Wellness

Appointment Reason for Visit: HTN F/U

Select Reason(s) for Visit (Chief Complaint):

Patient Problem List:

Clinic Favorites List:

ALLERGIC RHINITIS  
ESSENTIAL HYPERTENSION BENIGN

No Clinic Favorites

Search: palpitations

Find Now

Description of Everything

- + palpitations
- + Stress Test-Induced Palpitations
  - chest pain accompanied by palpitations
  - fainting preceded by rapid or irregular heartbeat
  - nervous or anxious with rapid heartbeat

Add

Remove

Selected Reason(s) for Visit:

Selected Reason(s) for Visit	New vs. Follow-Up	Comments
ESSENTIAL HYPERTENSION BENIGN	Follow-Up	
palpitations	New	

Administrative Issues

Special Work Status

- ☐ Diving Status
- ☒ Flying Status
- ☐ On Mobility
- ☐ Jumping Status
- ☐ Military Police
- ☐ Submarine

Appointment Classification

- ☒ Outpatient
- ☐ Inpatient
- ☐ Ambulatory Procedure Visit

Comments

OK

Cancel

FileEditViewGoToolsActionsHelp

Clear Vitals

Save Vitals

S/O

Close

Adult

Patient encounters

ROBBINS, KENNETH K 20/100-10-7535 35yo M DOB:18 Jul 1965

PRF

Options

Folder List

Desktop

Alert Review

Appointments

Telephone Consults

Search

Patient List

Consults

New Results

Dental

Reports

Tools

Web Browser

CHCS-I

ROBBINS, KENNETH K

Demographics

Health History

Lab

Radiology

Flowsheets

Current Encounter

ReviewEntry

Date...25 Jan 2001 12:22

☐ Visual Acuity☐ Oxygen Sat.☐ Peak Flow☐ Female Only Data

Standard Vital Signs

BP:130 / 85

Display Orthostatic

HR:84 bpm

RR: /minute

T: °F

Height/Weight

Ht:72 in182.8 cm

Wt:175 lb79.38 kg

BMI: 23.73BSA: 2.013 square meters

Tobacco Use

☐ Patient Uses Tobacco

Comments

OK

Cancel

Version: 2.1 Build: 265

User: DOCTOR, LAMP

Host: NMC PORTSMOUTH

1/25/01

12:26 PM

FileEditViewGoToolsActionsHelp

Edit Vitals

Delete Vitals

Graph Vitals

\*C Temp

S/O

Close

Adult

Patient encounters

ROBBINS, KENNETH K 20/100-10-7535 35yo M DOB:18 Jul 1965

PRF

Options

Folder List

Desktop

Alert Review

Appointments

Telephone Consults

Search

Patient List

Consults

New Results

Dental

Reports

Tools

Web Browser

CHCS-I

ROBBINS, KENNETH K

Demographics

Health History

Lab

Radiology

Flowsheets

Current Encounter

Review

Entry

SearchType...

All time periods

Refresh

Date	BP	HR	RR	T	HT	WT	Tobacco
6/21/2001 1301	130/90	80	18	98.6			No
6/21/2001 1301	140/100	80	18	98.6			No
6/21/2001 1301	155/105	80	18	98.6			No
6/21/2001 1301	160/110	95	20	98.6			No
6/21/2001 1220	150/104	84	12	98.6			No
6/21/2001 1220	180/115	89	12	98.6	70	250	No
1/24/2001 1441	124/80	65			72	178	No
1/23/2001 1009	130/84	87			72	180	No
1/17/2001 1348	136/82	70			72	178	No
1/16/2001 1431	130/86	80					No
1/12/2001 1531	124/78	69			72	180	No
1/11/2001 1332	120/88	120	22	99	72	189	No
1/11/2001 1038	125/80	68			72	180	No
12/7/2000 1431	120/80	82			72	185	No
12/6/2000 1553	130/82	65			73	190	No
11/2/2000 0953	120/80	80			72	175	No
11/1/2000 1514	120/80	80			72	175	No
10/13/2000 1445	120/80	80			72	180	No

BP: 130/90, HR: 80, RR: 18, T: 98.6 °F 6/21/2001 1301 EST (AGENT, BARRY T)

Close

Version: 2.1 Build: 265

User: DOCTOR, LAMP

Host: NMC PORTSMOUTH

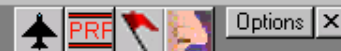
1/25/01

12:23 PM



Patient encounters

ROBBINS, KENNETH K 20/100-10-7535 35yo M DOB:18 Jul 1965



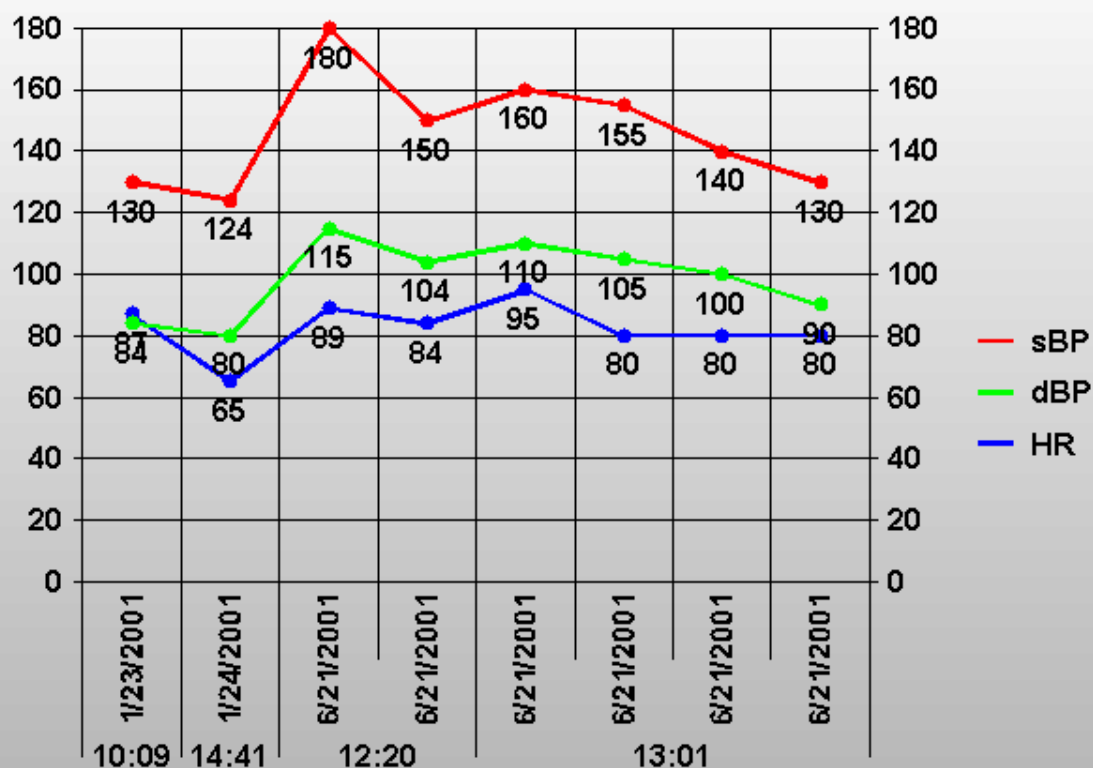
Options

Folder List

- Desktop
  - Alert Review
  - Appointments
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  - CHCS-I
- ROBBINS, KEN
  - Demographics
  - Health History
  - Lab
  - Radiology
  - Flowsheets
  - Current Encounters

Graph Vitals

## Vital Signs



## Graph Options

- ☒ Show data lines
- ☒ Show data point values

## Chart Type

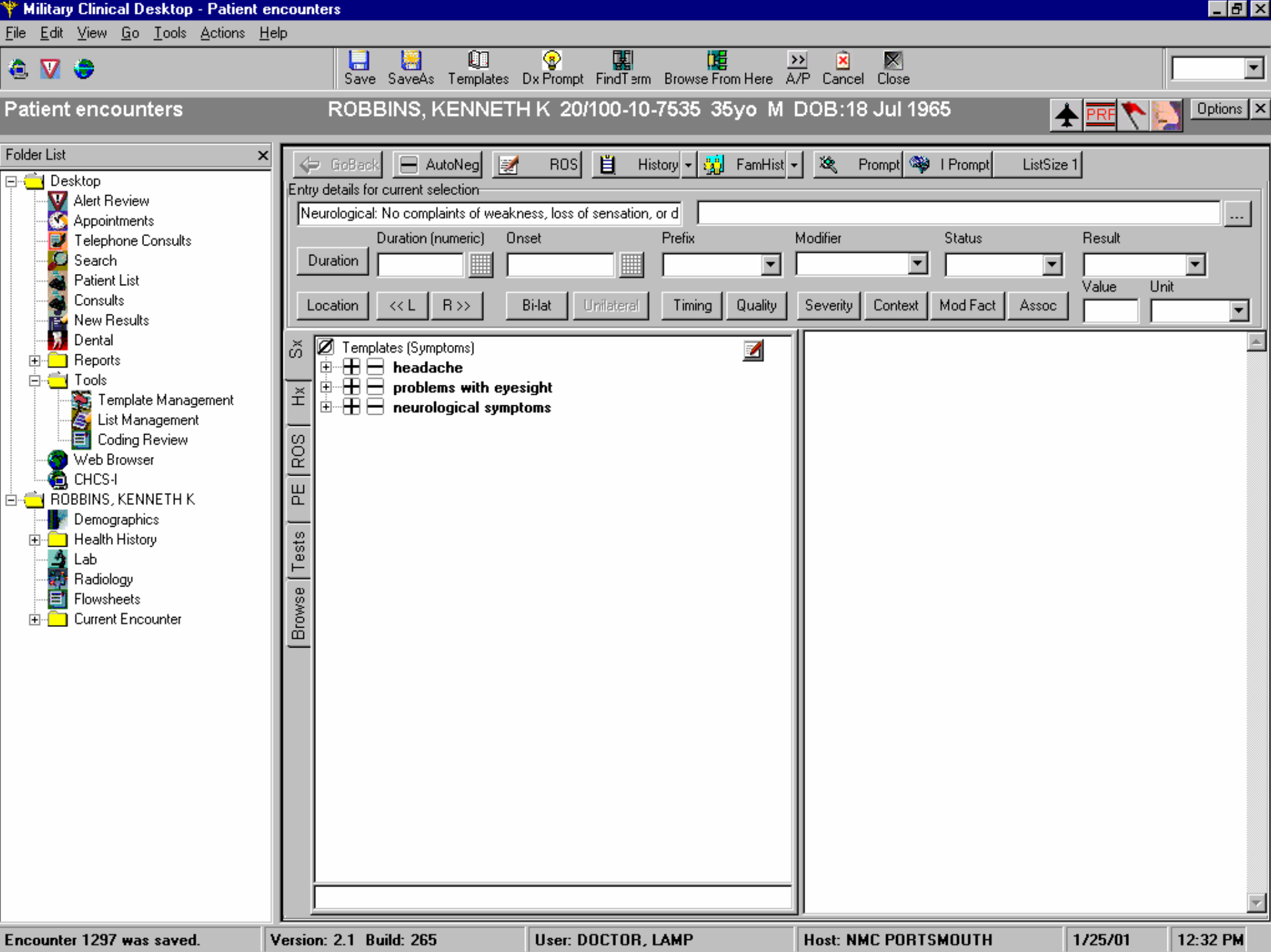
- ☒ 2-D Line
- ☐ 2-D Bar
- ☐ 3-D Line
- ☐ 3-D Bar

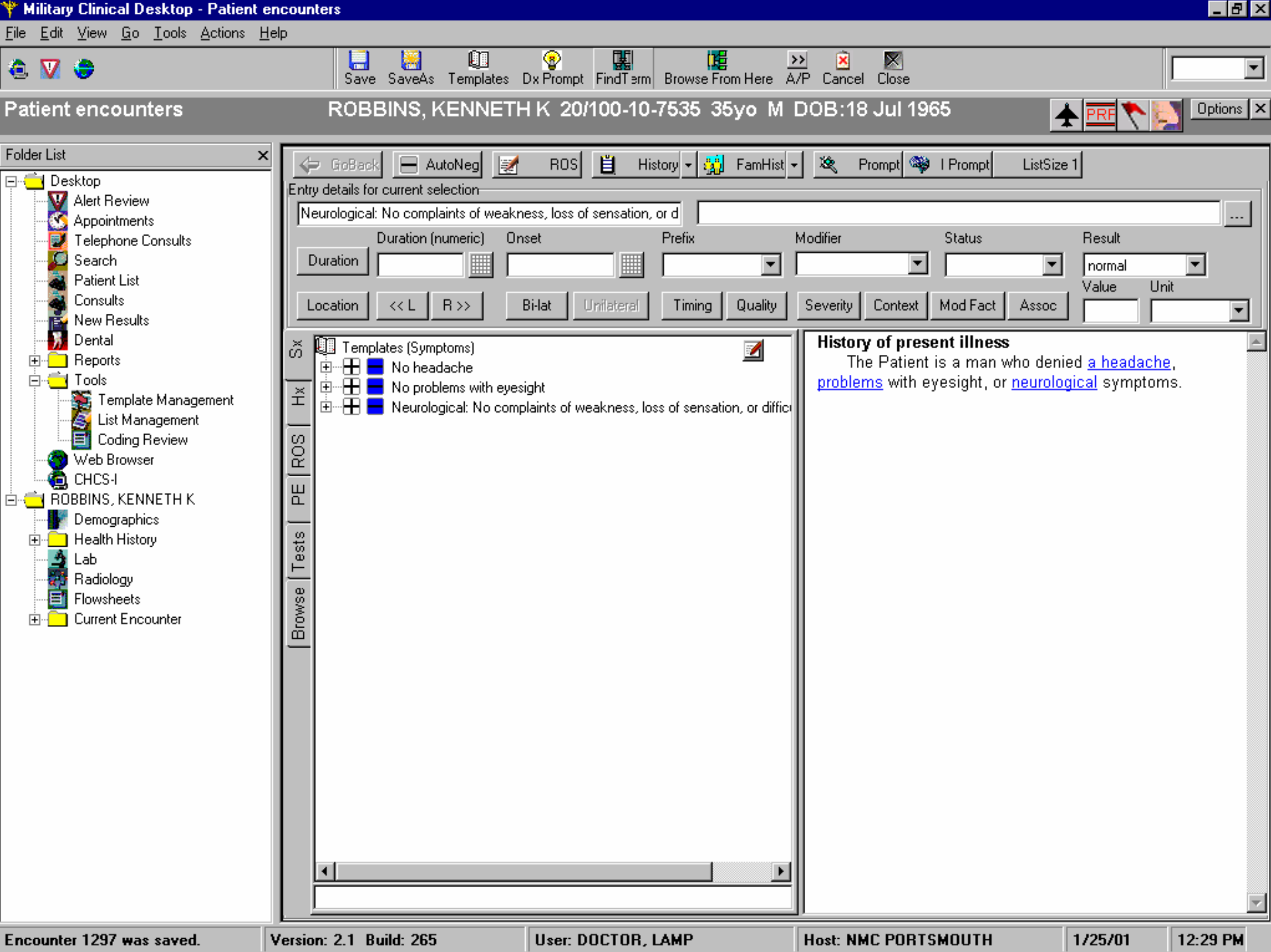
OK

Print

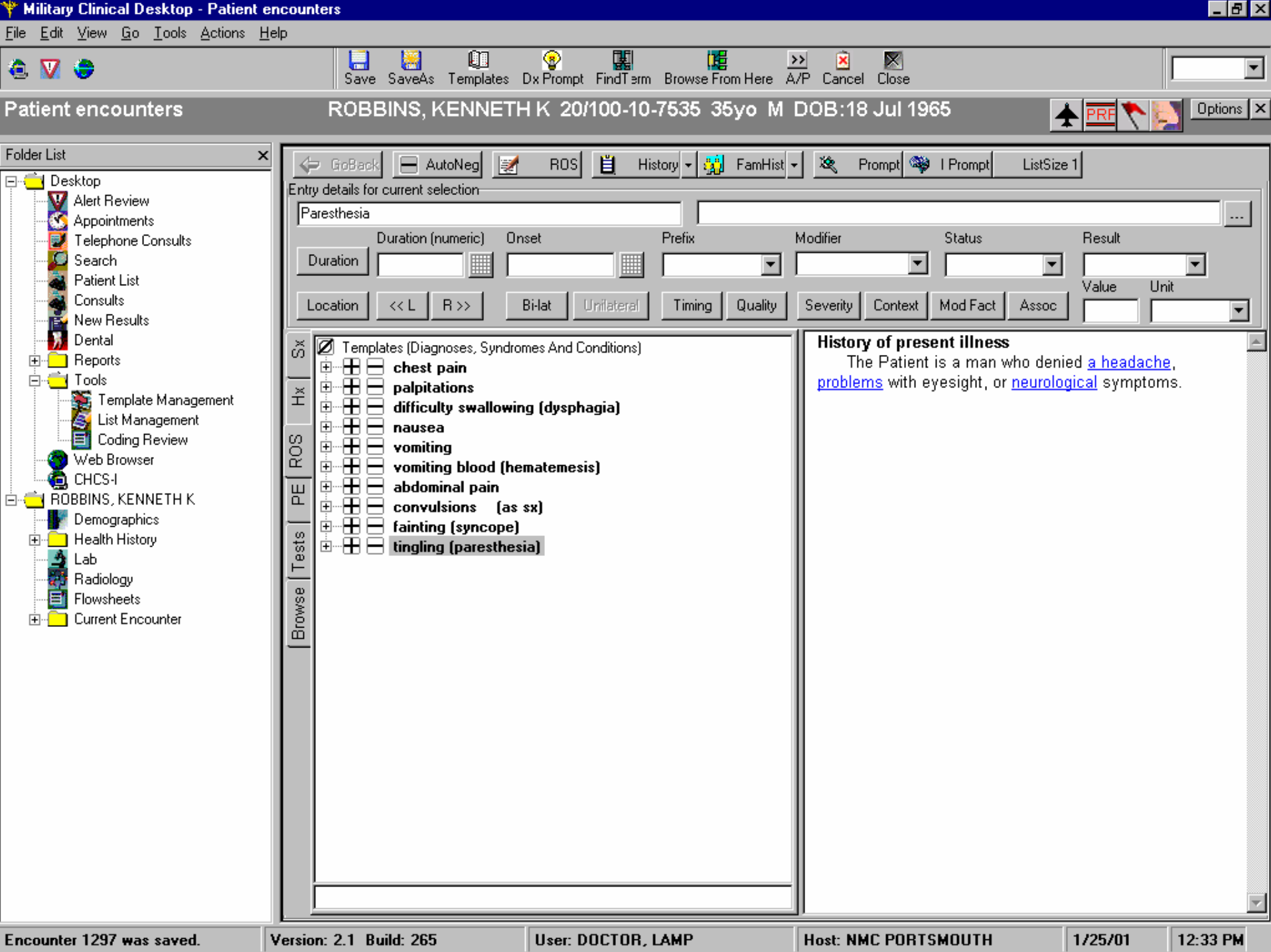
Refresh

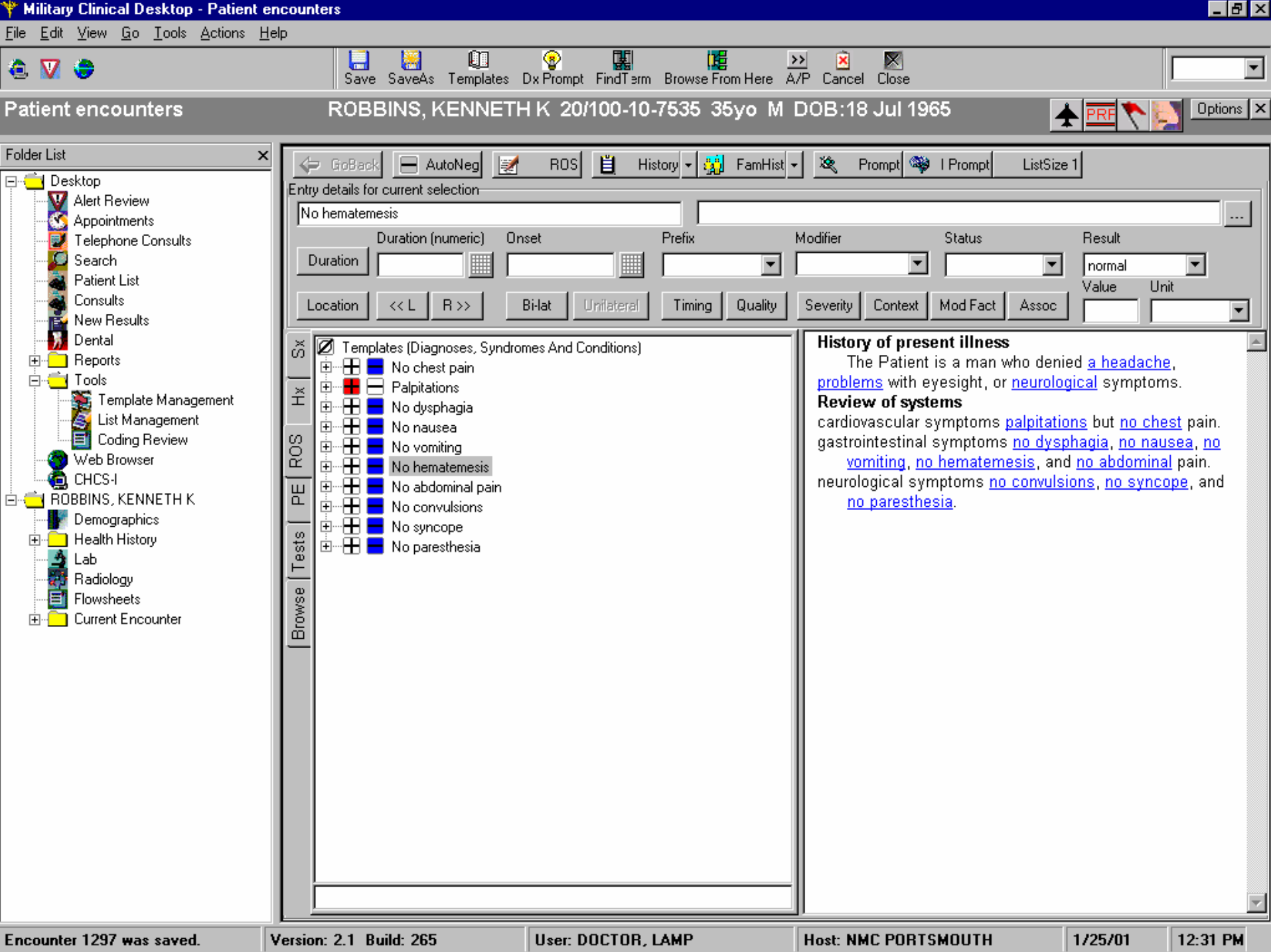
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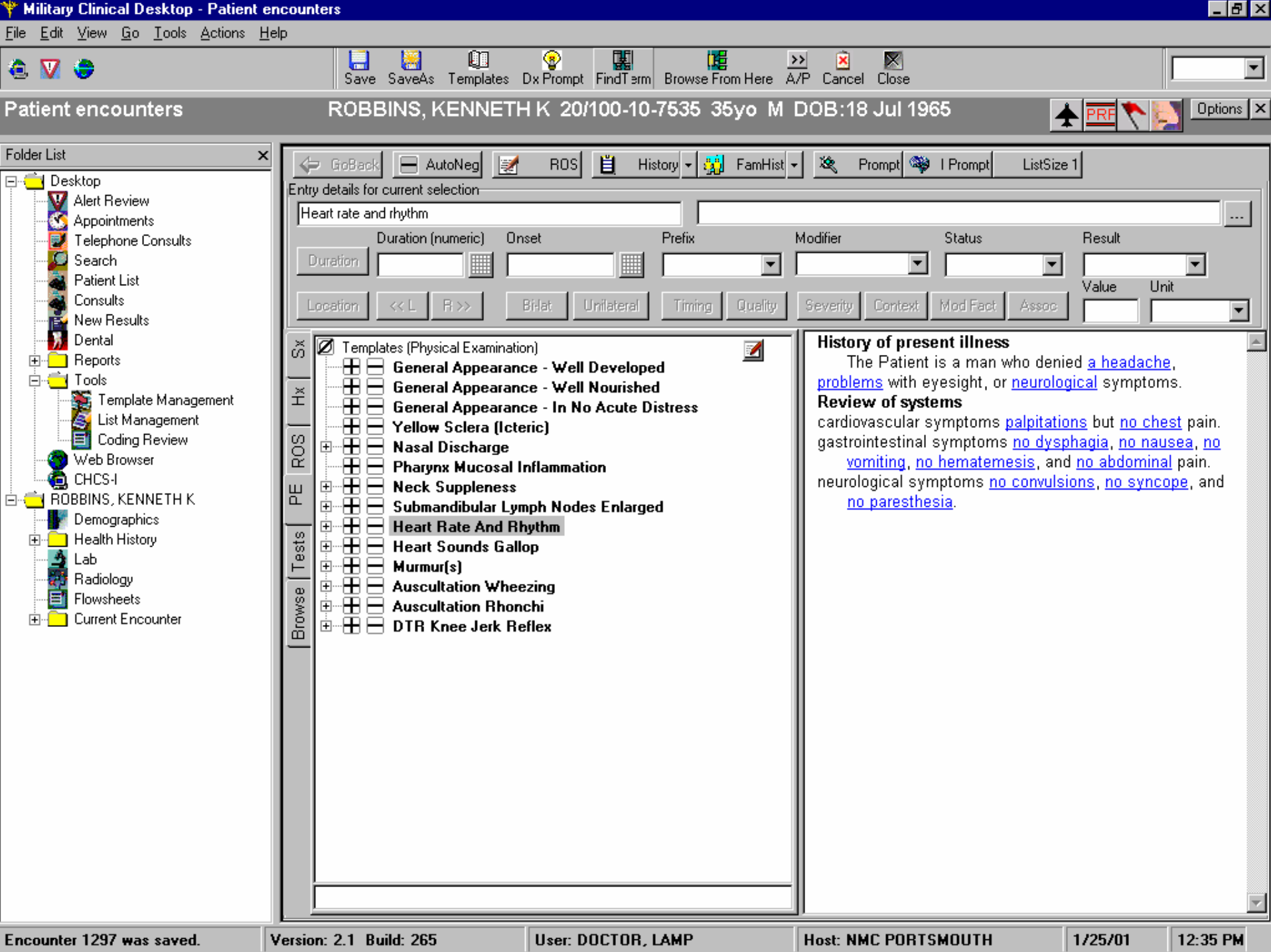












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  - Flowsheets
  - Current Encounter

GoBack AutoNeg ROS History FamHist Prompt I Prompt ListSize 1

Heart rate and rhythm

occasional irreg beats

Duration	Duration (numeric)	Onset	Prefix	Modifier	Status	Result

	Location	<< L	R >>	B/Hat	Unilateral	Timing	Quality	Severity	Context	Mod Fact	Assoc	Value	Unit
1													
2													
3													
4													
5													
6													
7													
8													
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58													
59													
60													
61													
62													

Review	Tests	PE	ROS	Hx	Sx
	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/> Templates (Physical Examination)
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> the patient appeared well developed
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> the patient appeared well nourished
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> the patient appeared to be in no acute distress
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> The sclera showed no icterus
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> No nasal discharge was seen
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> The pharyngeal mucosa was not inflamed
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> The neck demonstrated no decrease in suppleness
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> No submandibular lymphadenopathy was seen
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> Heart rate and rhythm occasional irreg beats
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> No gallop was heard
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> No murmur was heard
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> No wheezing was heard
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> No rhonchi were heard
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> The knee jerk was normal

The Patient is a man who denied [a headache](#), [problems](#) with eyesight, or [neurological](#) symptoms.

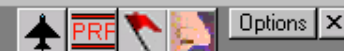
cardiovascular symptoms [palpitations](#) but [no chest](#) pain.  
gastrointestinal symptoms [no dysphagia](#), [no nausea](#), [no vomiting](#), [no hematemesis](#), and [no abdominal](#) pain.  
neurological symptoms [no convulsions](#), [no syncope](#), and [no paresthesia](#).

General appearance: The patient appeared well developed, well nourished, and in no acute distress. Eyes: The sclera showed no icterus. Nose: No nasal discharge was seen. Oral cavity: The pharyngeal mucosa was not inflamed. Neck: The neck demonstrated no decrease in suppleness. Lymph Nodes: No submandibular lymphadenopathy was seen. Cardiovascular: Heart rate and rhythm occasional irreg beats but no gallop was heard. Cardiovascular System: No murmur was heard. Lungs: No wheezing was heard and no rhonchi were heard. Neurological: The knee jerk was normal.



## Patient encounters

ROBBINS, KENNETH K 20/100-10-7535 35yo M DOB:18 Jul 1965



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- ROBBINS, KENNETH K
  - Demographics
  - Health History
  - Lab
  - Radiology
  - Flowsheets
  - Current Encounter

Date: 25 Jan 2001 1212 EST

Status: In Progress

MTF: NMC PORTSMOUTH

Primary Provider: DOCTOR, LAMP

Type: WALK IN

Clinic: PMT

HYDRODIURIL (HYDROCHLOROTHIAZIDE), 25MG Expired T 1 TAB PO QD #90 RF3 3 17 Mar 2000

**Allergies**Iodine Containing Agents  
Sulfa-Drugs**Screening** Written by DOCTOR, LAMP @ 25 Jan 2001 1221 EST**Appointment Reason For Visit: HTN F/U****Selected Reason(s) For Visit:**ESSENTIAL HYPERTENSION BENIGN(Follow-Up) Comments:  
palpitations(New) Comments:**Vitals** BP: 130/85, HR: 84, HT: 72in, WT: 175lb, BMI: 23.73, BSA: 2.013 square meters 1/25/2001 1222 EST (DOCTOR, LAMP)**S/O** **SO Note** Written by DOCTOR, LAMP @ 25 Jan 2001 1229 EST**History of present illness**

The Patient is a man who denied a headache, problems with eyesight, or neurological symptoms.

**Review of systems**cardiovascular symptoms palpitations but no chest pain.  
gastrointestinal symptoms no dysphagia, no nausea, no vomiting, no hematemesis, and no abdominal pain.  
neurological symptoms no convulsions, no syncope, and no paresthesia.**Physical findings**General appearance: The patient appeared well developed, well nourished, and in no acute distress.  
Eyes: The sclera showed no icterus.  
Nose: No nasal discharge was seen.  
Oral cavity: The pharyngeal mucosa was not inflamed.  
Neck: The neck demonstrated no decrease in suppleness.  
Lymph Nodes: No submandibular lymphadenopathy was seen.  
Cardiovascular: Heart rate and rhythm occasional irreg beats but no gallop was heard.  
Cardiovascular System: No murmur was heard.  
Lungs: No wheezing was heard and no rhonchi were heard.  
Neurological: The knee jerk was normal.**A/P****Disposition**



## Patient encounters

ROBBINS, KENNETH K 20/100-10-7535 35yo M DOB:18 Jul 1965



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Pri	ICD	Diagnosis	Chronic/Acute	Type

Priority

Orders &amp; Procedures



Diagnosis

Order Sets

Procedure

Order Consults

Order Lab

Order Rad

Order Med

Other Therapies

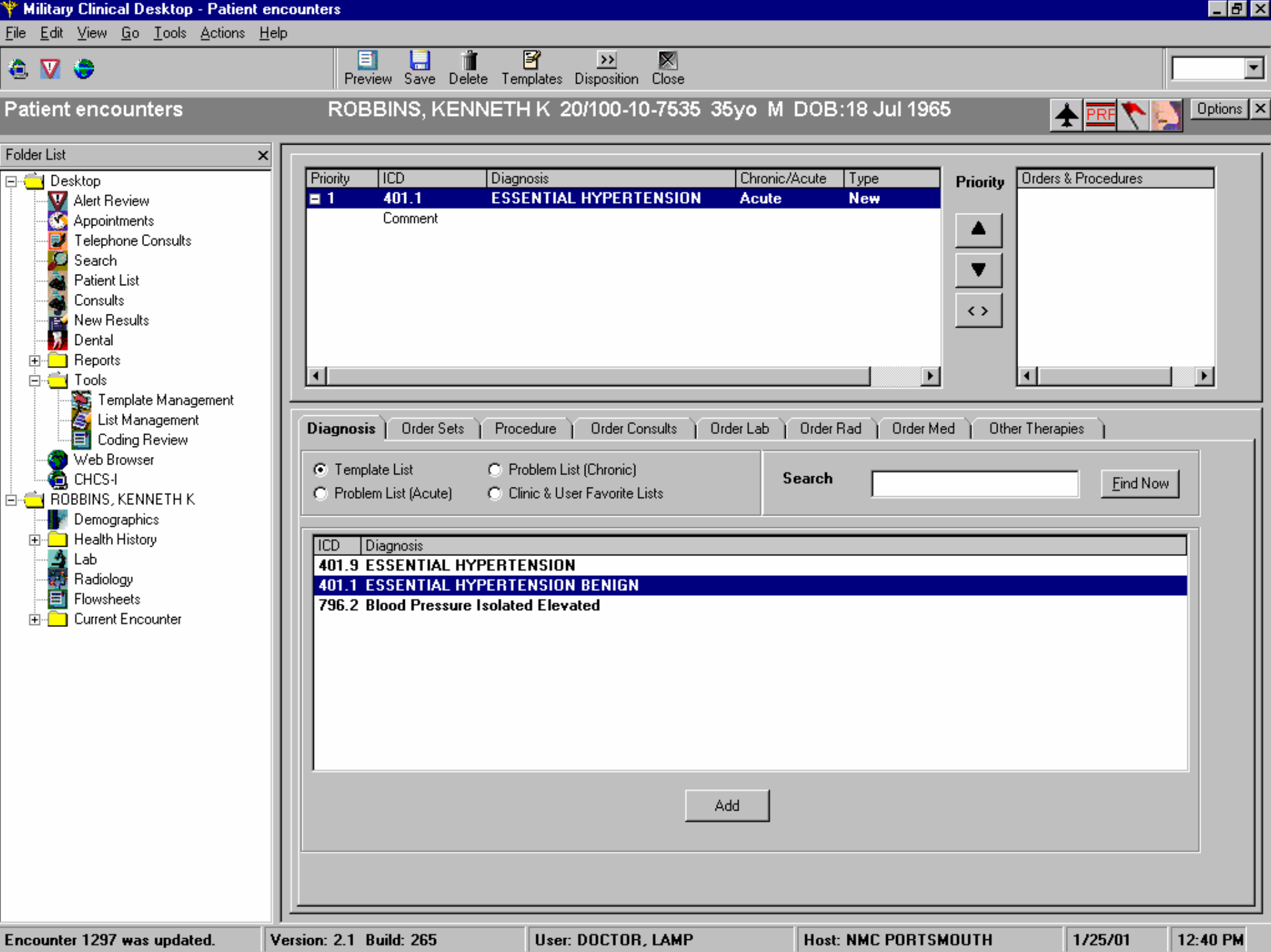
☒ Template List☐ Problem List (Chronic)☐ Problem List (Acute)☐ Clinic & User Favorite Lists

Search

Find Now

ICD	Diagnosis
401.9	ESSENTIAL HYPERTENSION
401.1	ESSENTIAL HYPERTENSION BENIGN
796.2	Blood Pressure Isolated Elevated

Add



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  - Current Encounter

Priority	ICD	Diagnosis	Chronic/Acute	Type
1	401.1	ESSENTIAL HYPERTENSION	Acute	New
Comment				

Priority

Orders & Procedures

## Diagnosis

Order Sets

Procedure

Order Consults

Order Lab

Order Rad

Order Med

Other Therapies

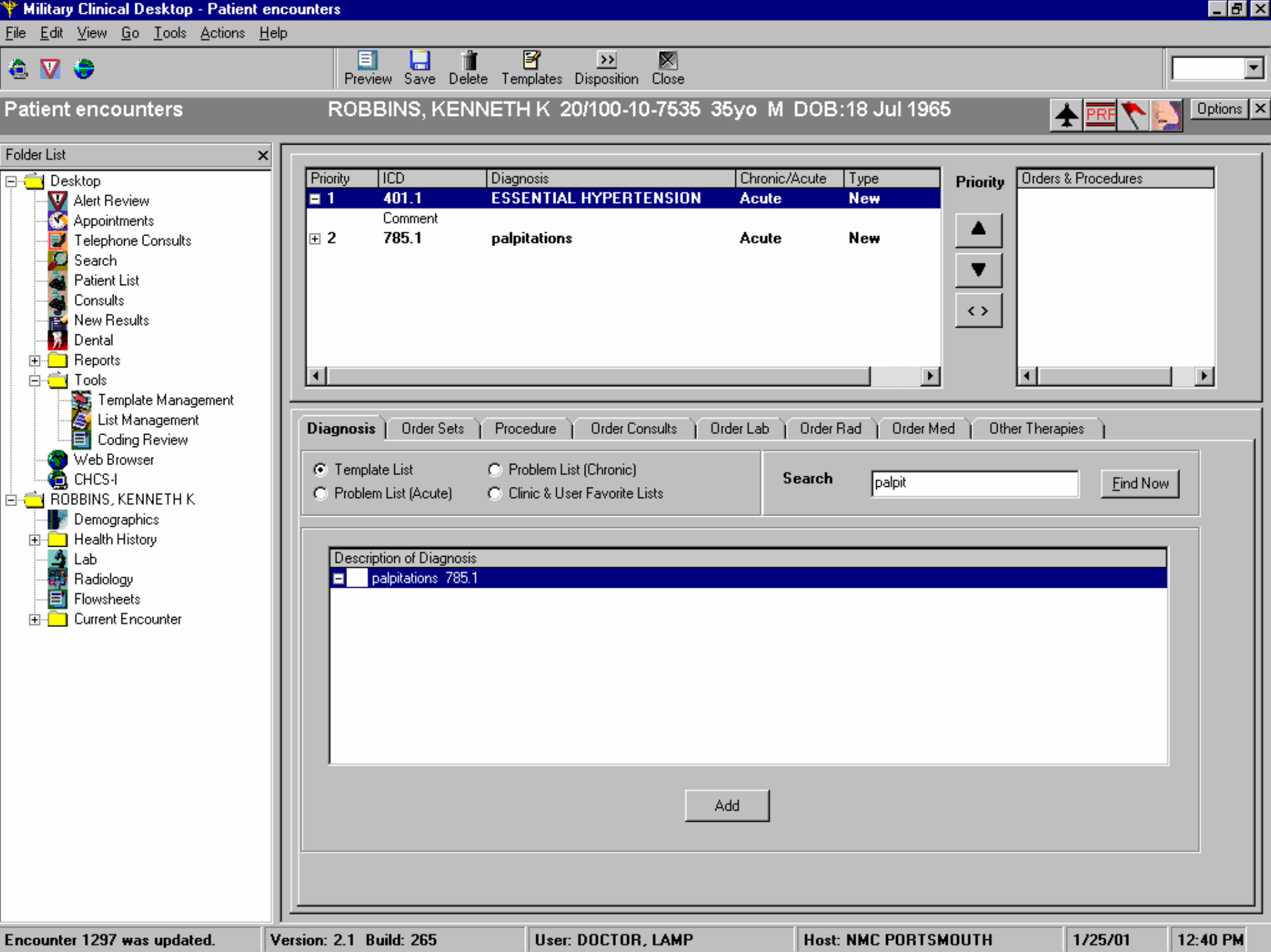
☒ Template List☐ Problem List (Chronic)☐ Problem List (Acute)☐ Clinic & User Favorite Lists

Search

Find Now

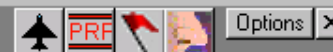
ICD	Diagnosis
401.9	ESSENTIAL HYPERTENSION
401.1	ESSENTIAL HYPERTENSION BENIGN
796.2	Blood Pressure Isolated Elevated

Add



## Patient encounters

ROBBINS, KENNETH K 20/100-10-7535 35yo M DOB:18 Jul 1965



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- ROBBINS, KENNETH K
  - Demographics
  - Health History
  - Lab
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  - Current Encounter

Priority	ICD	Diagnosis	Chronic/Acute	Type
1	401.1	ESSENTIAL HYPERTENSION	Acute	New
Comment				
2	785.1	palpitations	Acute	New

Priority

Orders &amp; Procedures



## Diagnosis

Order Sets

Procedure

Order Consults

Order Lab

Order Rad

Order Med

Other Therapies

☒ Template List☐ Problem List (Chronic)☐ Problem List (Acute)☐ Clinic & User Favorite Lists

Search

palpit

Find Now

## Description of Diagnosis

palpitations 785.1

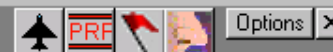
Add





## Patient encounters

ROBBINS, KENNETH K 20/100-10-7535 35yo M DOB:18 Jul 1965



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  - Health History
  - Lab
  - Radiology
  - Flowsheets
  - Current Encounter

Priority	ICD	Diagnosis	Chronic/Acute	Type
1	401.1	ESSENTIAL HYPERTENSION	Acute	New
2	785.1	palpitations	Acute	New
Comment				
Procedure(s)		Rhythm Strip ECG		

Priority

Orders &amp; Procedures

Rhythm Strip ECG

Diagnosis

Order Sets

**Procedure**

Order Consults

Order Lab

Order Rad

Order Med

Other Therapies

☒ Template List

☐ Clinic & User Favorite Lists

Search

Find Now

CPT Procedures

93010 ECG Interpretation And Report Only

93040 Rhythm Strip ECG

93000 Electrocardiogram

Add

FileEditViewGoToolsActionsHelp

Save

Screening Questions

Add Providers

Sign

Close

Patient encounters

ROBBINS, KENNETH K 20/100-10-7535 35yo M DOB:18 Jul 1965

PRF

Options

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ROBBINS, KENNETH K

Demographics

Health History

Lab

Radiology

Flowsheets

Current Encounter

Alternate Care Value(ACV): Direct Care OnlyPatient Category (PATCAT) : A11 USA ACTIVE DUTY OFFICERDMIS ID :MEPRS : BHAA

DispositionAdmin Options

Disposition

☒ Released Without Limitations

☐ Released with Work/Duty Limitations

☐ Sick at Home / Quarters

☐ Immediate Referral

☐ Left Against Medical Advice

☐ Admitted

☐ Expired

Referral to:

Comments ...

Profile ...

24 Hrs48 Hrs72 Hrs

Appointment Classification

☒ Outpatient

☐ Inpatient

☐ Ambulatory Procedure Visit

CalculatedSelection

Setting

Outpatient

Detailed service type

Outpatient Visit

Calculated E&M code (Default vs User Override)

☒ 99213: Estab Outpatient Expanded H&P - Low Complexity Decisions

☐

Exam type

General Multi-System

☐ >50% time spent counseling

Total face to face or Floor time

Patient status

☐ New patient

☒ Existing patient

Follow Up

☐ PRN

☐ With PCM

☒ In 6 Months

In

Clinic

Comments

Discussed

☒ Diagnosis

☒ Medication(s)/Treatment(s)

☒ Patient

☐ Potential Side Effects

☐ Alternatives

indicated understanding

Show column details

Clear Calculator

Calculate E&M Code

Level	HPI	ROS	PFSH	Overall History	EXAM	Overall MDM	Dx/Mgt Options	Complexity of Data	Overall Risk	Problem Risk	Tests Risk	Mgt Risk
1								X			X	
2	X	X		X	X	X	X		X	X		
3												
4												

OK

Cancel

Version: 2.1 Build: 265

User: DOCTOR, LAMP

Host: NMC PORTSMOUTH

1/25/01

12:45 PM

FileEditViewGoToolsActionsHelp

Refresh

Add Note

Add Providers

Templates

Sign

Close

Patient encounters

ROBBINS, KENNETH K 20/100-10-7535 35yo M DOB:18 Jul 1965

PRF

Options

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CHCS-I

ROBBINS, KENNETH K

Demographics

Health History

Lab

Radiology

Flowsheets

Current Encounter

Date: 25 Jan 2001 1212 EST

Status: In Progress

MTF: NMC PORTSMOUTH

Primary Provider: DOCTOR, LAMP

Type: WALK IN

Clinic: PMT

Selected Reason(s) For Visit:

ESSENTIAL HYPERTENSION BENIGN(Follow-Up) Comments:

palpitations(New) Comments:

Vitals

BP: 130/85, HR: 84, HT: 72in, WT: 175lb, BMI: 23.73, BSA: 2.013 square meters 1/25/2001 1222 EST (DOCTOR, LAMP)

S/O

SO Note

Written by DOCTOR, LAMP @ 25 Jan 2001 1229 EST

History of present illness

The Patient is a man who denied a headache, problems with eyesight, or neurological symptoms.

Review of systems

cardiovascular symptoms palpitations but no chest pain.

gastrointestinal symptoms no dysphagia, no nausea, no vomiting, no hematemesis, and no abdominal pain.

neurological symptoms no convulsions, no syncope, and no paresthesia.

Physical findings

General appearance: The patient appeared well developed, well nourished, and in no acute distress.

Eyes: The sclera showed no icterus.

Nose: No nasal discharge was seen.

Oral cavity: The pharyngeal mucosa was not inflamed.

Neck: The neck demonstrated no decrease in suppleness.

Lymph Nodes: No submandibular lymphadenopathy was seen.

Cardiovascular: Heart rate and rhythm occasional irreg beats but no gallop was heard.

Cardiovascular System: No murmur was heard.

Lungs: No wheezing was heard and no rhonchi were heard.

Neurological: The knee jerk was normal.

A/P

AP

Written by DOCTOR, LAMP @ 25 Jan 2001 1242 EST

1. ESSENTIAL HYPERTENSION BENIGN

2. palpitations

Procedure(s): Rhythm Strip ECG

Disposition

Disposition

Written by DOCTOR, LAMP @ 25 Jan 2001 1245 EST

Disposition: Released Without Limitations

Follow up in 6 Months.

Discussed Diagnosis and Medication(s)/Treatment(s) with Patient who indicated understanding

E&M Code: 99213: Estab Outpatient Expanded H&P - Low Complexity Decisions

AddNote

Encounter 1297 Disposition section

Version: 2.1 Build: 265

User: DOCTOR, LAMP

Host: NMC PORTSMOUTH

1/25/01

12:46 PM

**SO Note** Written by DOCTOR, LAMP @ 25 Jan 2001 1229 EST

### History of present illness

The Patient is a man who denied a headache, problems with eyesight, or neurological symptoms.

### Review of systems

cardiovascular symptoms palpitations but no chest pain.  
gastrointestinal symptoms no dysphagia, no nausea, no vomiting, no hematemesis, and no abdominal pain.  
neurological symptoms no convulsions, no syncope, and no paresthesia.

### Physical findings

General appearance: The patient appeared well developed, well nourished, and in no acute distress.

Eyes: The sclera showed no icterus.

Nose: No nasal discharge was seen

Oral cavity: The pharyngeal mucosa was not inflamed.

Neck: The neck demonstrated no decrease in suppleness

**Lymph Nodes:** No submandibular lymphadenopathy was seen.

Cardiovascular: Heart rate and rhythm occasional irreg beats but no gallop was heard.

Cardiovascular System: No murmur was heard

Lungs: No wheezing was heard and no rhonchi were heard

Neurological: The knee jerk was normal

**AP** Written by DOCTOR, LAMP @ 25 Jan 2001 1242 EST

## 1. ESSENTIAL HYPERTENSION BENIGN

2. palpitations

Procedure(s): Rhythm Strip ECG

**Disposition** Written by DOCTOR, LAMP @ 25 Jan 2001 1245 EST

Disposition: Released Without Limitations

Follow up in 6 Months.

Discussed Diagnosis and Medication(s)/Treatment(s) with Patient who indicated understanding

E&M Code: 99213: Estab Outpatient Expanded H&P - Low Complexity Decisions

Enter Your Password:

☒ Auto-Print☒ Count

Sign

☐ Cosigner Required

Search

☐ No-Count

Cancel

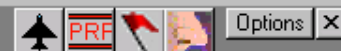
AddNote



Any Status

## Appointments

ROBBINS, KENNETH K 20/100-10-7535 35yo M DOB:18 Jul 1965



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Change Selections ...

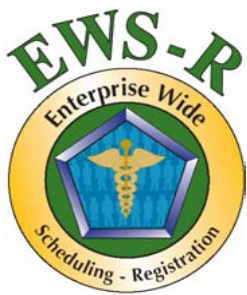
My Appointments in GENERAL MEDICINE CLINIC (BHAA) for 25 Jan 2001 .

Appt. Date/Time	Type	Patient	Status	Classification	Reason for Visit	FMP/SSN	Home Phone	Work Phone
25 Jan 2001 1201	WALK IN	ROBBINS, IAN I	CheckedIn	OutPatient	test	20/100107533	918 5550795	202 555948
25 Jan 2001 1211	WALK IN	ROBBINS, KENNETH K	CheckedIn	OutPatient	HTN F/U	20/100107535	918 5556734	202 555078

CHCS

# Defense Enrollment Eligibility Reporting System (DEERS) Integration Overview





# DEERS Mission



- *DoD's Benefit Entitlement System*
- **Maintain Personnel & Benefit Information for**
  - All Active, Retired, and Reserve
  - All Civil Service personnel
  - All eligible dependents of Active, Retired, and Reserve personnel and eligible surviving beneficiaries of members who died on Active Duty or after retirement
- **Support DoD ID Card Application - RAPIDS, Smart Cards**
- **Support Benefit Delivery - Medical, Education, Others**
- **Enable Improved Business Processes in DoD**
- **Reduce Fraud and Abuse of Government Benefits**
- **Support Force Health Protection & Medical Readiness**
- **Provide Identity Services Throughout the DoD**



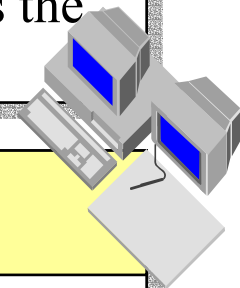


# DEERS, RAPIDS, and DOES



**Independent but closely coupled established systems which provide eligibility information for DoD benefits**

DEERS	RAPIDS
<ul style="list-style-type: none"><li>• <i>Defense Enrollment Eligibility Reporting System</i></li><li>• <b>Database</b> with 23 million records providing:<ul style="list-style-type: none"><li>– Accurate and timely information on all eligible uniformed service members (active, reserve, retired), their families and DoD civilians</li></ul></li><li>• Detailed information on DoD benefit program eligibility</li></ul>	<ul style="list-style-type: none"><li>• <i>Real-time Automated personnel Identification System</i></li><li>• <b>Application</b> that produces the ID card</li></ul>
	DOES
	<ul style="list-style-type: none"><li>• <i>Defense Online Enrollment System</i></li><li>• <b>Application</b> used for all health plan enrollments worldwide</li></ul>





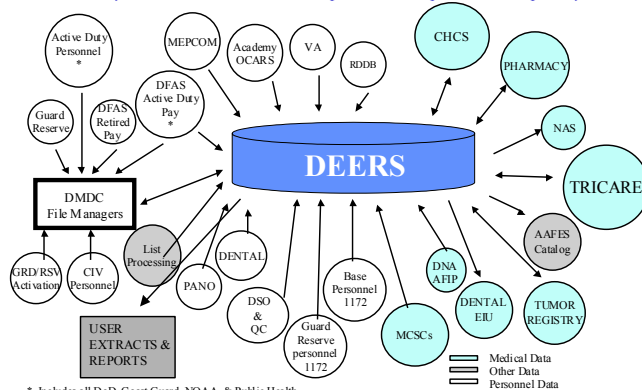
# DEERS and TRICARE



## DEERS INTERFACES



Current Daily Transaction Volume: 250K updates; 850K queries - 1.1M per day



DEERS - Tricare Central Database for:

- Eligibility
- Medical Readiness/Immunization
- Beneficiary Demographics
- Portability Information
- National Enrollment Information

DEERS is uniquely positioned to help -

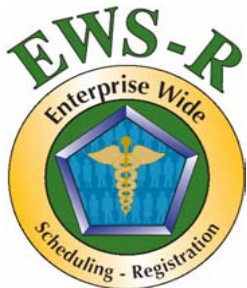
- Interfaces to the Services and Components in place for Sponsors
- Family member information through RAPIDS
- National Enrollment provides policy and coverage info
- Communications protocols in place with MTFs and MCSC's
- EDI person ID enables seamless data exchange on all
- Standards based interchange spec published - HIPAA/EDI ready
- Common Access Card adds strong authentication



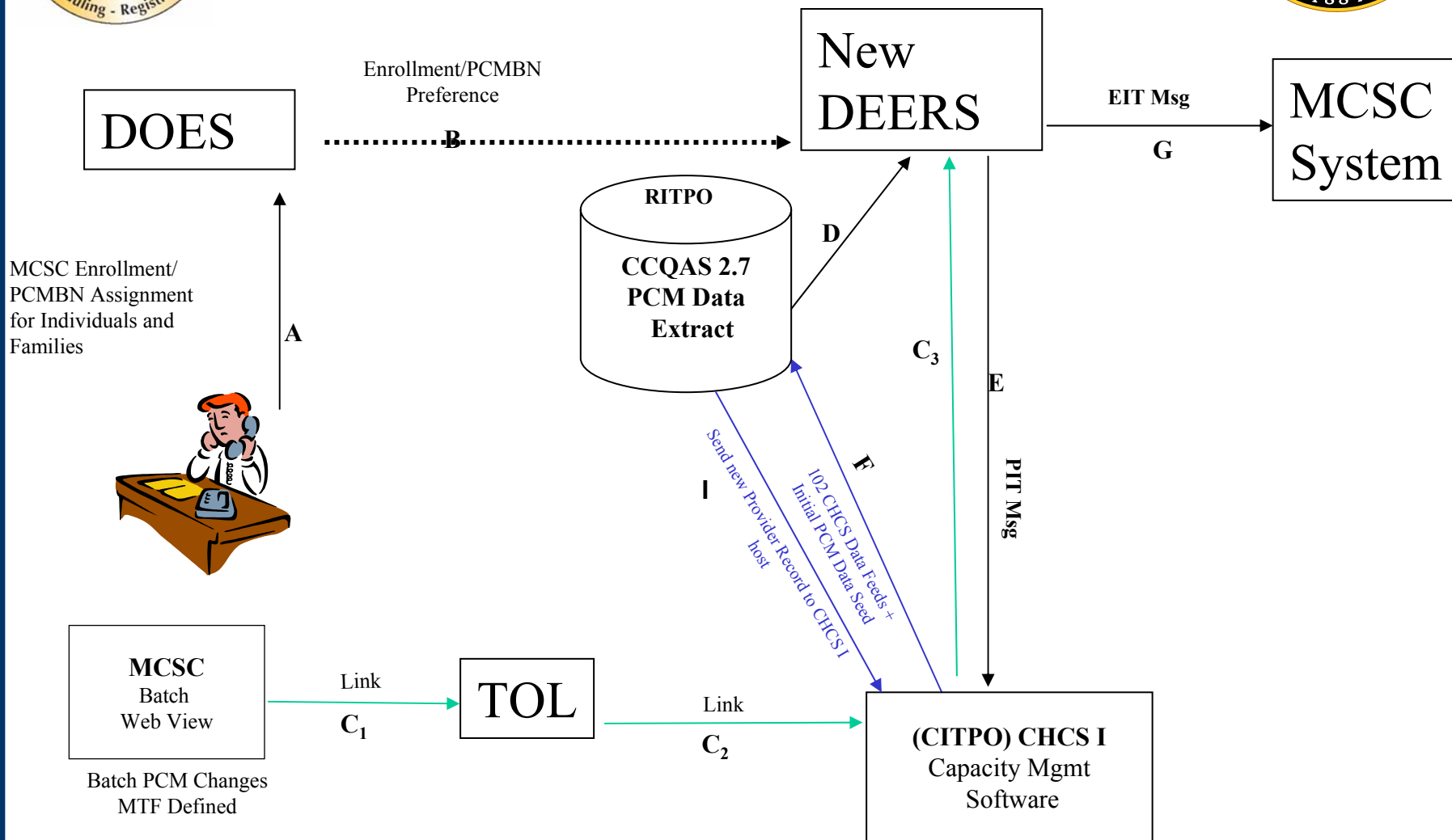
# Joint Goals for DEERS and the MHS

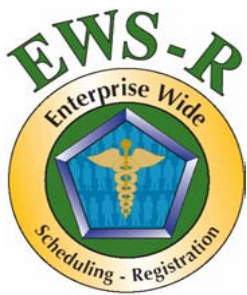


- Establish full portability
- Facilitate one TRICARE
  - One look to the beneficiary
  - One common set of processes and business rules
- Establish better Government ownership of key information
- Position the government to be able to implement changes more quickly at less cost
- Improve data quality
- Allow MTFs to focus on patient care instead of enrollment
- Use standards where appropriate



# Direct Care PCM Assignment





# Direct Care PCM Assignment



## LEGEND

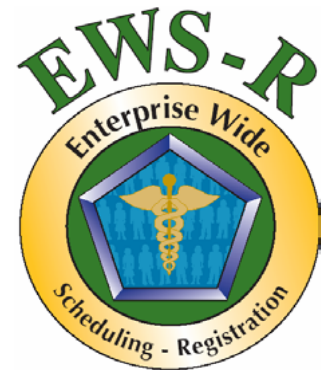
- **B** - DEERS Application
- **C1 & C2** – MCSC Batch Web View link
- **C3** - Batch PCM reassignments
- **D** – Daily feed of aggregated PCM updates
- **E** – **PIT** message for each PCM change
- **F** - PCM updates to CCQAS
- **G** – **EIT** message
- **I** – New provider record to CHCS I

## ACRONYMS

- EIT=Enrollment Information Transfer
- PIT=-PCM Information Transfer
- PCM = Primary Care Manager
- MTF = Military Treatment Facility
- PCMBN = PCM By Name
- DOES = DoD Online Enrollment System
- MCSC = Managed Care Support Contractor
- TOL = TRICARE On Line (Web Portal)
- CCQAS = Centralized Credentials Quality Assurance System
- CHCS = Composite Health Care System
- CITPO = Clinical Information Technology Program Office
- RITPO = Resources Information Technology Program Office

Insert  
Program or  
Office Logo  
Here

# CCQAS Integration Overview





# Overview Schedule



	FY02		FY03				FY04				FY05				FY06				FY07			
	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
CCQAS 2.6.7	Dev Test		Deploy				Sustainment															
CCQAS 2.6.8					Develop Test		Deploy	Sustainment														
CCQAS 2.7		CE Acquire	Configure, Test				Deploy				Sustainment											
CCQAS 3.0		CE Acquire	Configure, Test, Pilot				Deploy				Sustainment											



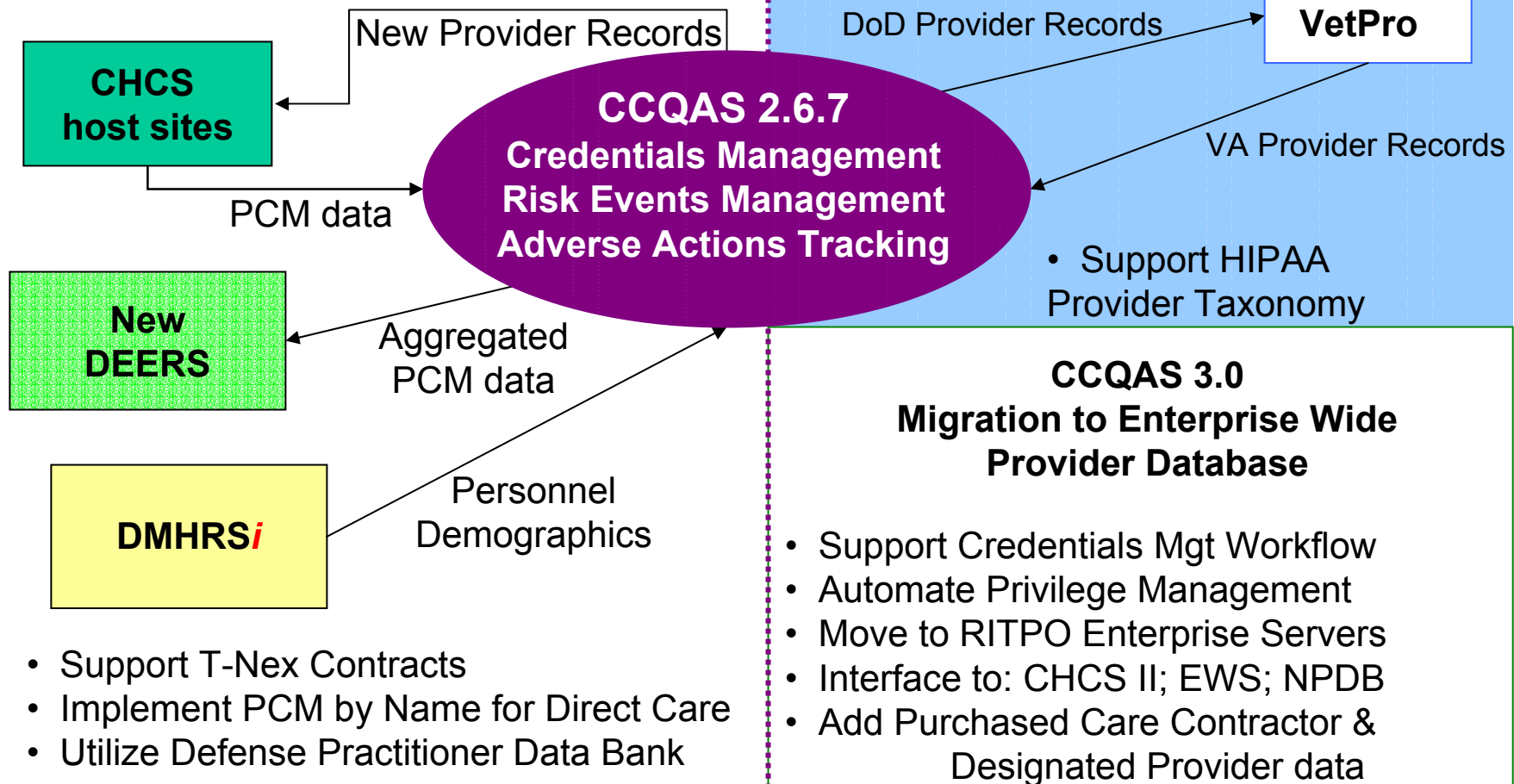


# Centralized Credentials Quality Assurance System (CCQAS)

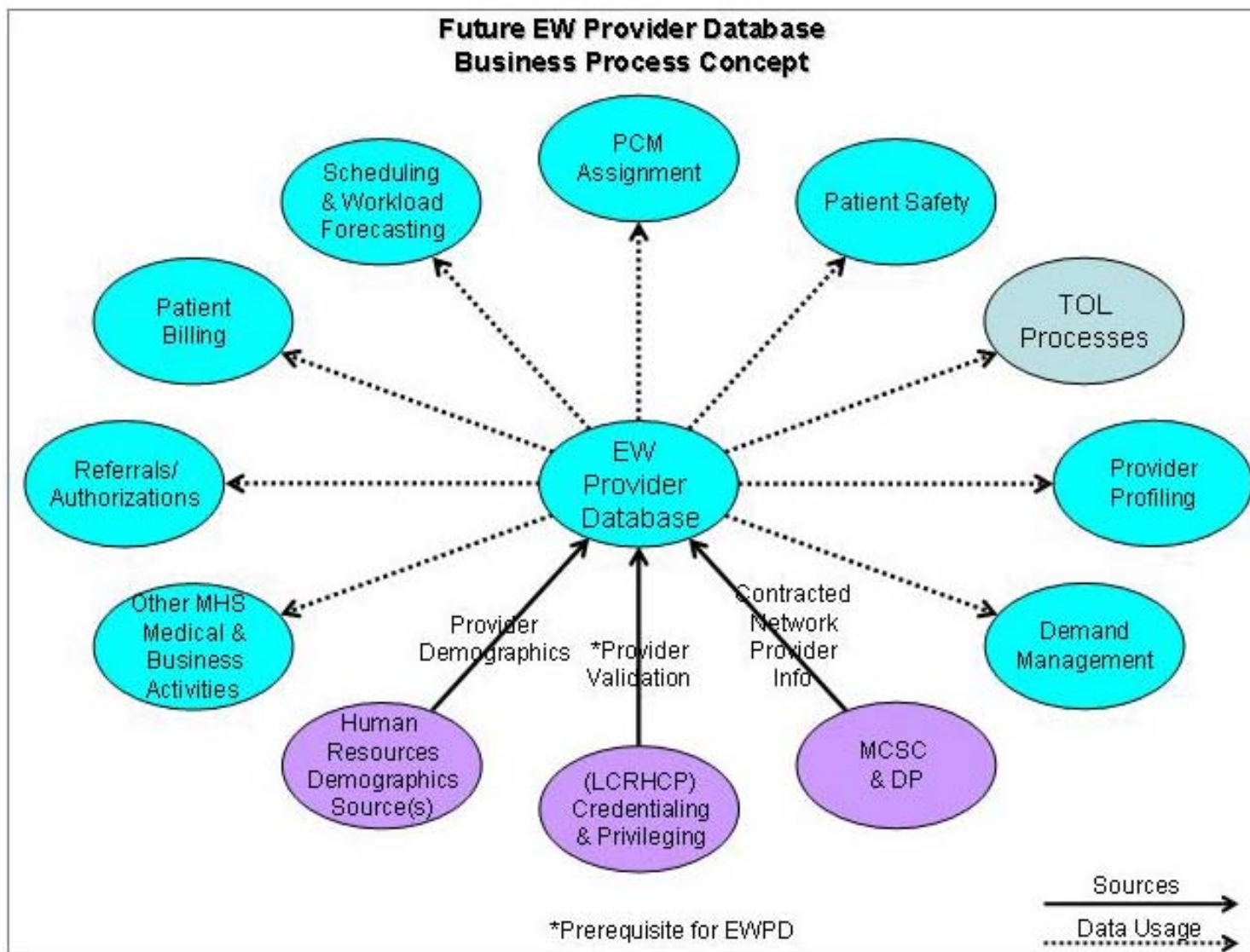


## CCQAS 2.7

## CCQAS 2.6.8







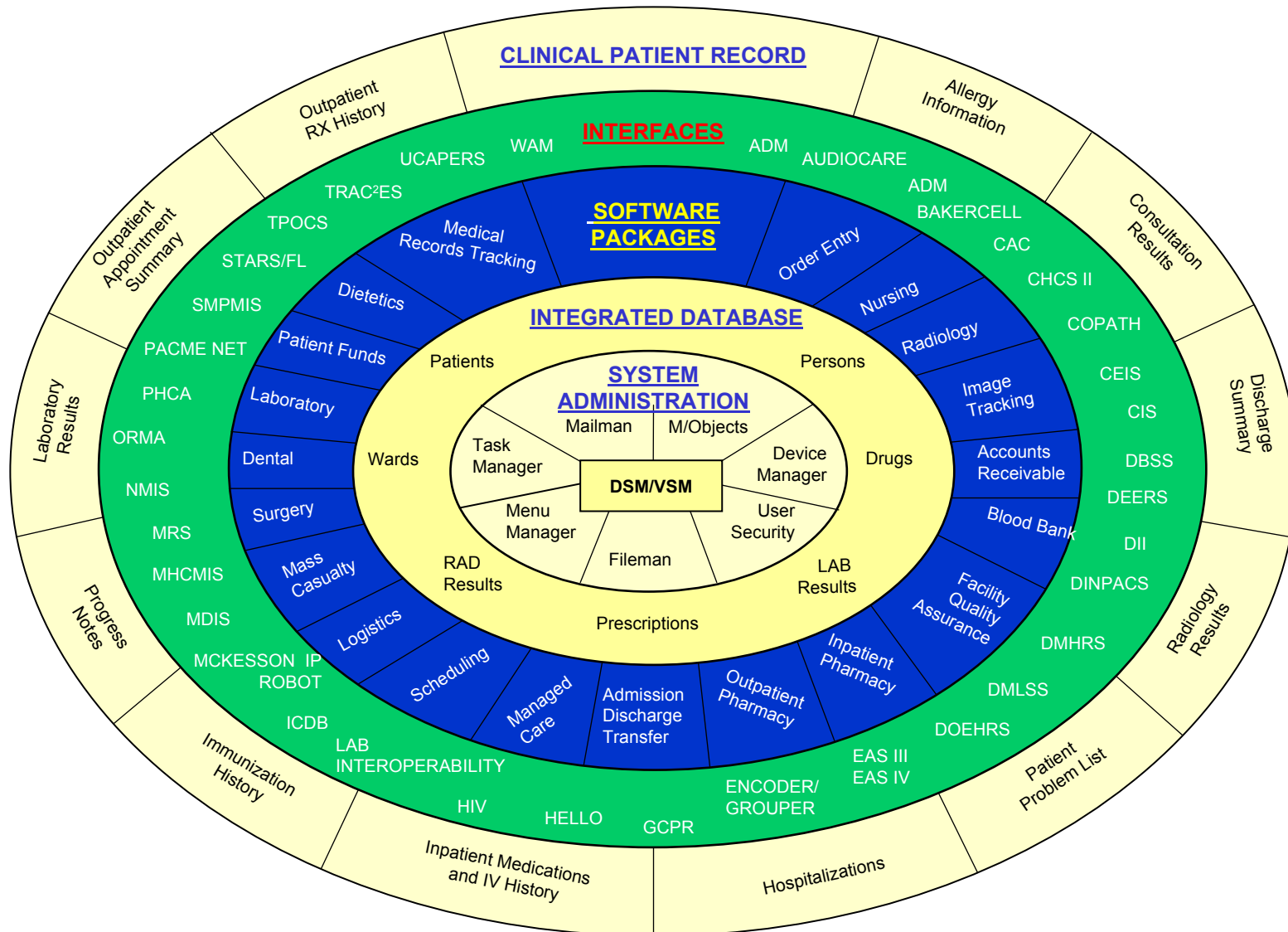


# Composite Healthcare System (CHCS) Overview

# CHCS Background

- Primary hospital information system for the Military Health System (MHS)
- Development begun in 1987
- Based on the Veterans Administration Decentralized Hospital Computer Program (DHCP)
  - Now called VistA
- Developed in the M (a.k.a. MUMPS) programming language
- Operates on OpenVMS operating system
- CHCS is deployed worldwide at all MHS Medical Treatment Facilities (MTF)
  - 100+ CHCS host configurations
  - 450+ places of care

# CHCS Components



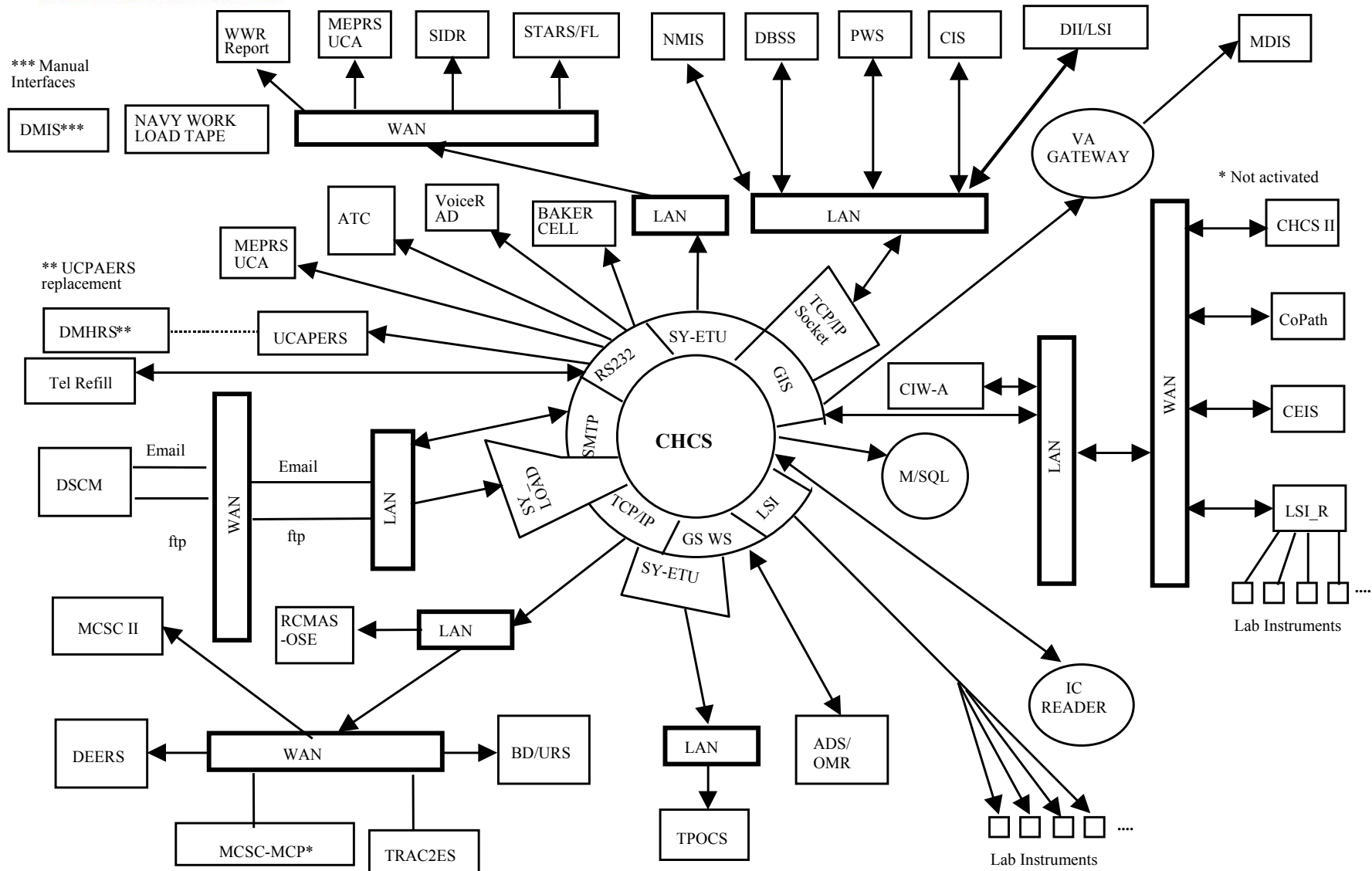
# CHCS Functional Capabilities

- Registration
  - Patient information
  - John Doe registration
  - Mass Casualty registration
  - Eligibility verification
- Appointment Scheduling
  - Primary Care appointments
  - Specialty Care
  - Telephone Consults
  - Ambulatory Procedures
  - Dental
  - Radiology
- Inpatient Visits

# CHCS Functional Capabilities

- Clinical Order Entry
- Laboratory
- Pharmacy
- Radiology
- Medical Record Management
- Dietetics
- Electronic Mail
- Administrative and Ad-Hoc Reporting

# CHCS Interfaces



# CHCS Interfaces

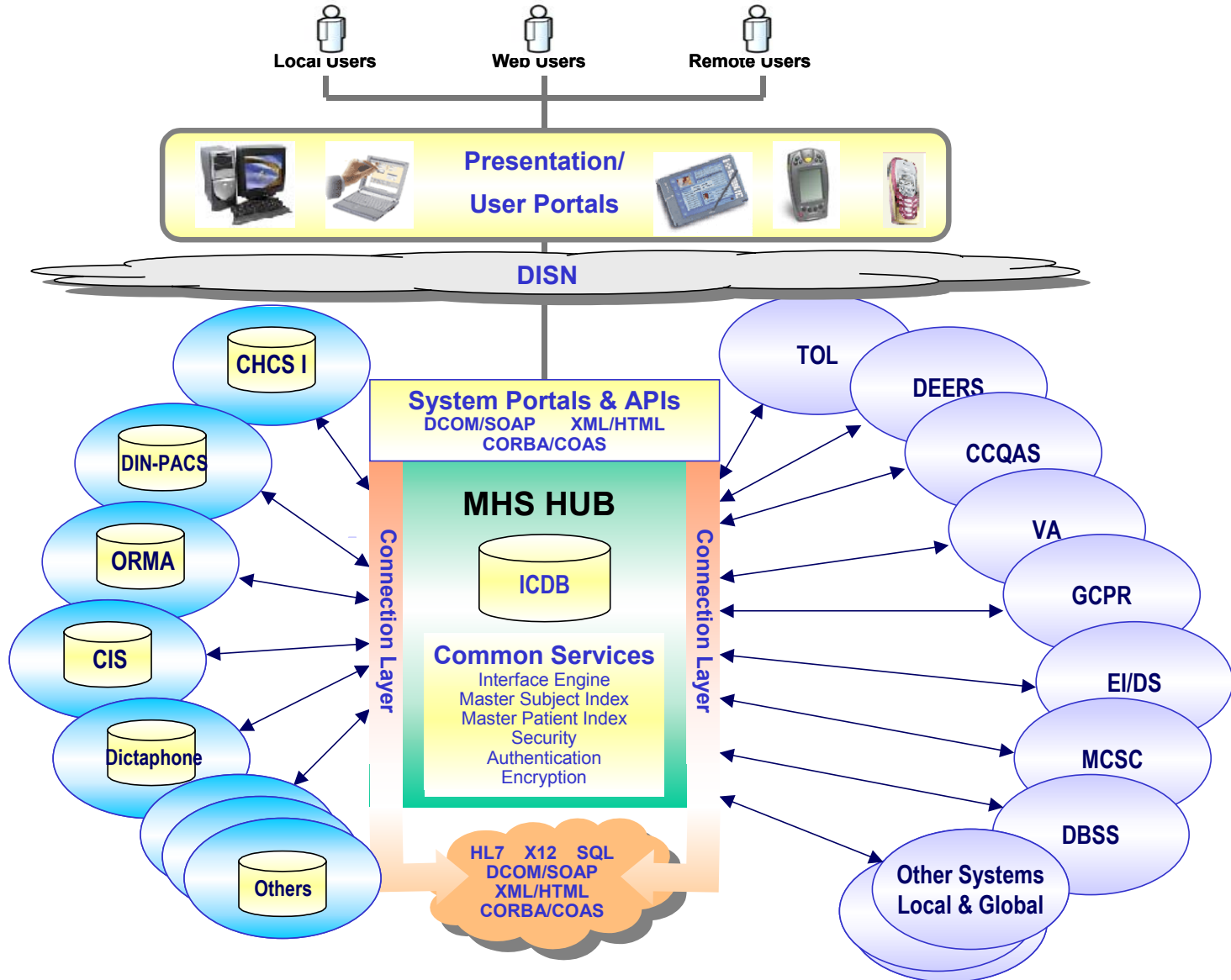
- CHCS serves as a primary source of medical data for ALL MHS interfacing systems
- Interfaces to 50+ other medical and administrative systems
- CHCS has a native interface engine capability
- The MHS is implementing a next generation EAI capability
  - Intended to replace CHCS as the MHS integration hub
- Many interfaces are based on the HL7 message standard
- Some interfaces are custom data formats
- Developing X12 message standards for HIPAA
- Most interfaces are uni-directional (broadcast only) from CHCS
- Some interfaces are bi-directional with inbound data to CHCS



# Registration and Scheduling Integration

- CHCS is the source of registration (demographic), ADT, and scheduling information for most interfaced systems
- All interfaces transmit registration information
- Many interfaces transmit inpatient visit information
- Several interfaces transmit scheduling information

# MHS HUB





# DMLSS Integration Overview





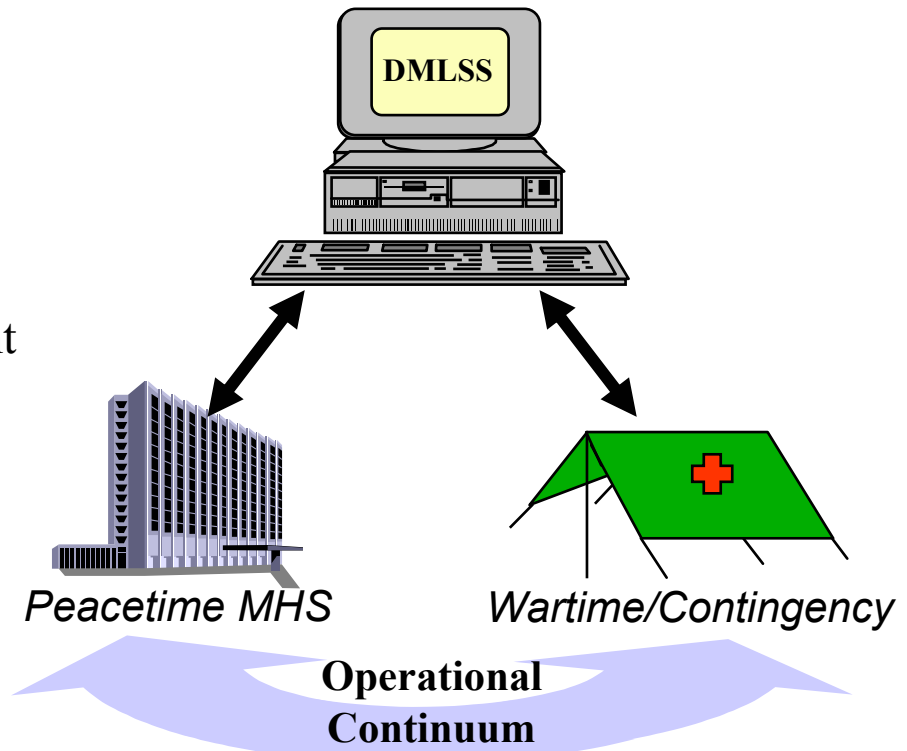
# DMLSS Mission Statement



***Dramatically improve the responsiveness of medical logistics support***

- ***Implement business innovations that significantly increase effectiveness of logistics support while reducing costs***
- ***Develop a high-quality, integrated medical logistics automated system for use by all Army, Air Force and Navy forces in both peace and war***

- Materiel
- Facilities
- Equipment & Technology Management
- Wholesale Functions





# Evolutionary Development and Deployment

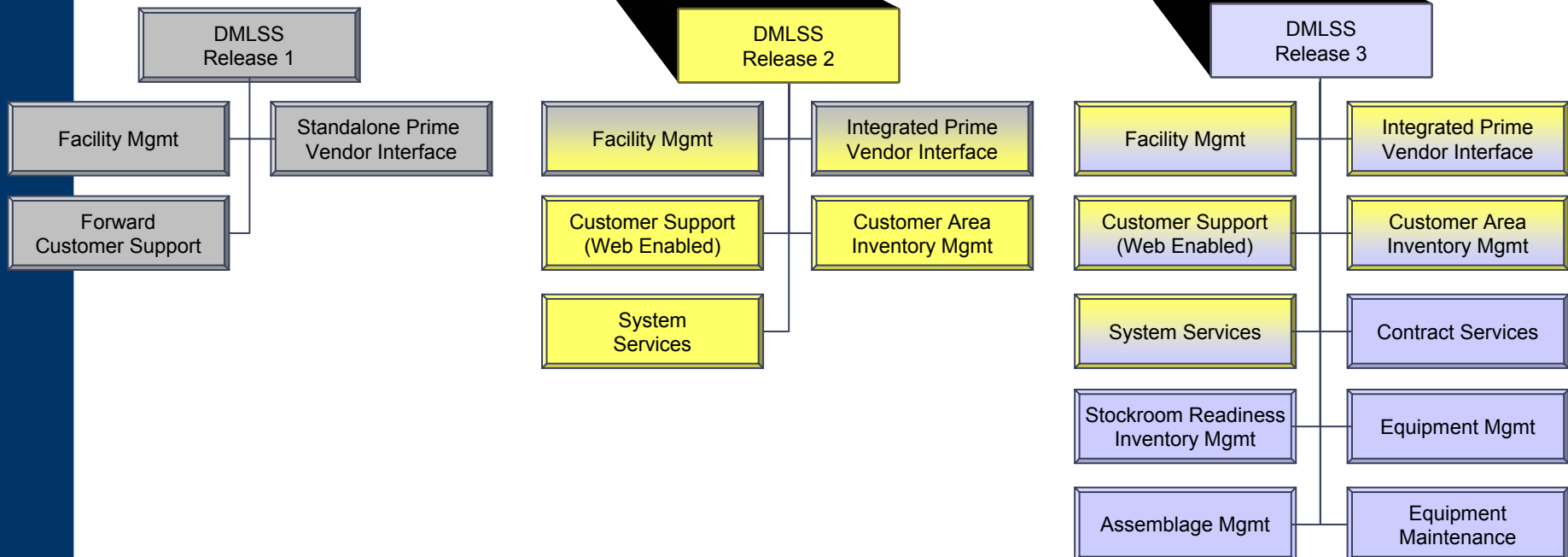


## DMLSS Release 2

- Deployment completed to 109 sites - December 01

## DMLSS Release 3

- Successfully operating at 30 DoD Hospitals
- Replaces legacy systems
- Performing all medical logistics systems support





# Release 3 Modules



## Customer Area Inventory Management *Replenishment Processing/Wireless Processing*

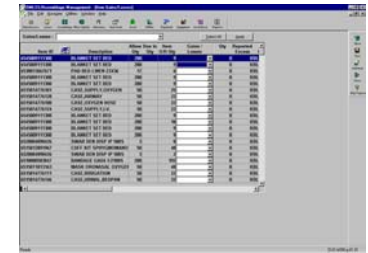


## Integrated Common System Services

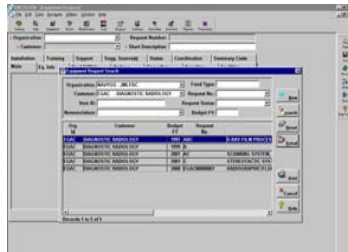
## Customer Support on the Web *Materiel Orders/Catalog Search/ Work Orders*



## Assemblage Management *Readiness Tool*

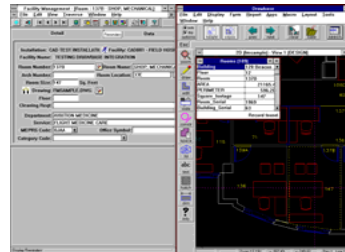


## Equipment & Technology Management *Life Cycle Management of Equipment*



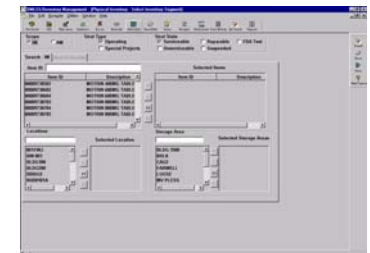
- Major Equipment Requirements
  - MRI/CT
    - Unique Identifier
    - Availability

## Facility Management *Computer Aided Drawings/ Facility Inventory*



- Facility Requirements
  - Building / Room Unique Identifier
  - Availability

## Stock Room Inventory Management *Physical Inventory/External Customer Support/Quality Assurance*

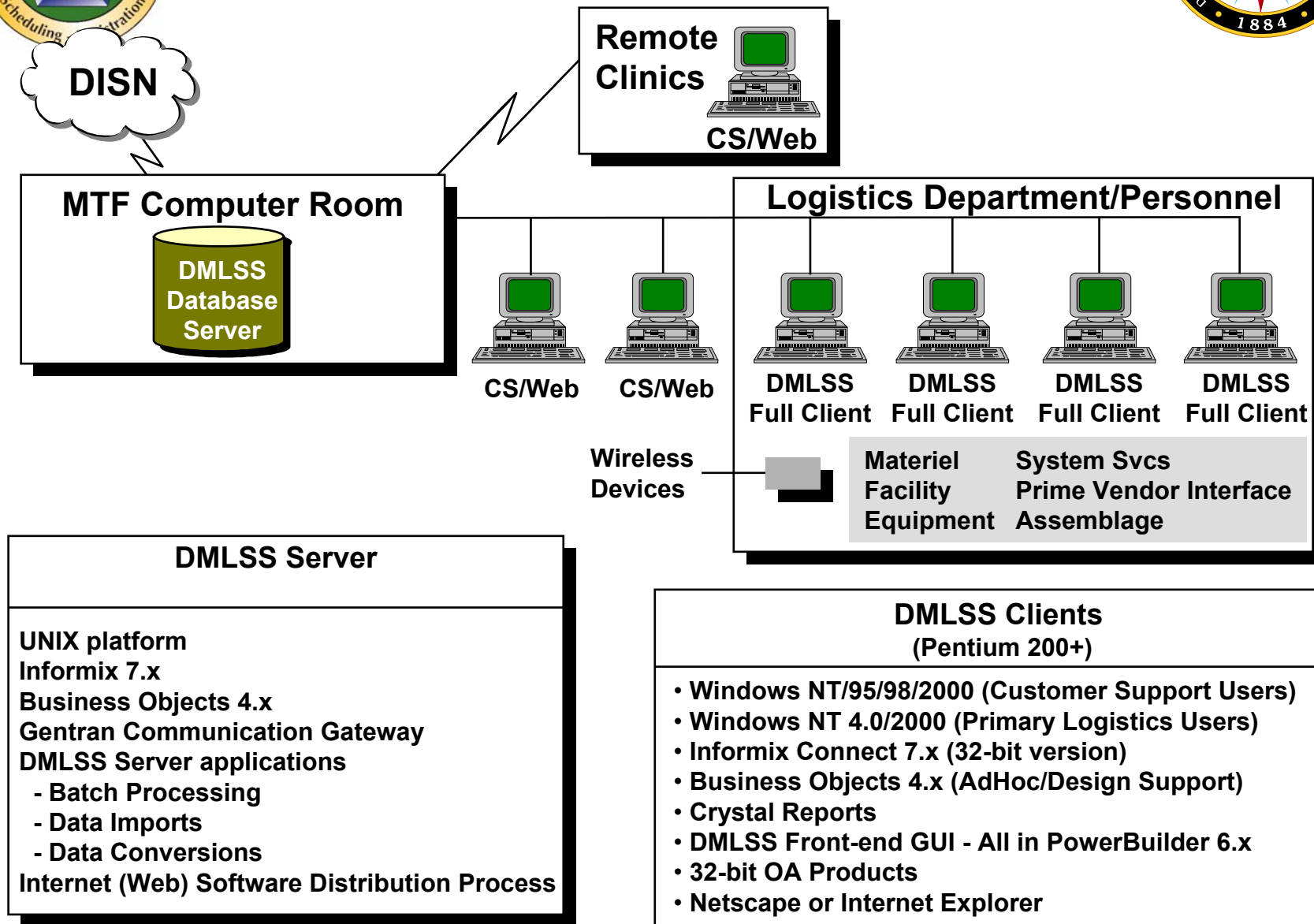


- Materiel Requirements
  - Provider Profile
  - Procedure Profile
    - Supplies
    - Minor Equipment



# DMLSS

## MTF Architecture





# DMHRS*i* Integration Overview







# **The Defense Medical Human Resources System – *internet* (DMHR*Si*)**

**Mr. Edward Leo Welsh III**

**Project Officer, DMHRSi**

**Resources Information Technology Program Office**

# What is DMHRS*i*?

**Simplify and standardize military medical human resource management**

- A **web-based** Tri-Service human resource management system
- Allow ready access to essential manpower, personnel, labor cost assignment, education & training, and personnel readiness information across the MHS enterprise

# Integrated Human Resource Management

**DMHR*S*i** can provide complete medical personnel asset visibility of all Active Duty, Reserve, Civilian, Contractor, Volunteer, or Borrowed Personnel

**Who are they?**

**Who is trained?**

**How much do they cost?**

**Who is deployable?**



**DMHR*S*i**  
**Manpower/Personnel**

**DMHR*S*i**  
**Education and Training**

**DMHR*S*i**  
**Labor Costing**

**DMHR*S*i**  
**Readiness**

# Increased Visibility of Personnel Assets

**DMHRS*i* Provide Tri-Service personnel visibility for roll-up and decision making**

Office of the Secretary  
Of Defense



Service Headquarters

Medical Region



or



Major Service Command

Medical Facility



Medical Department

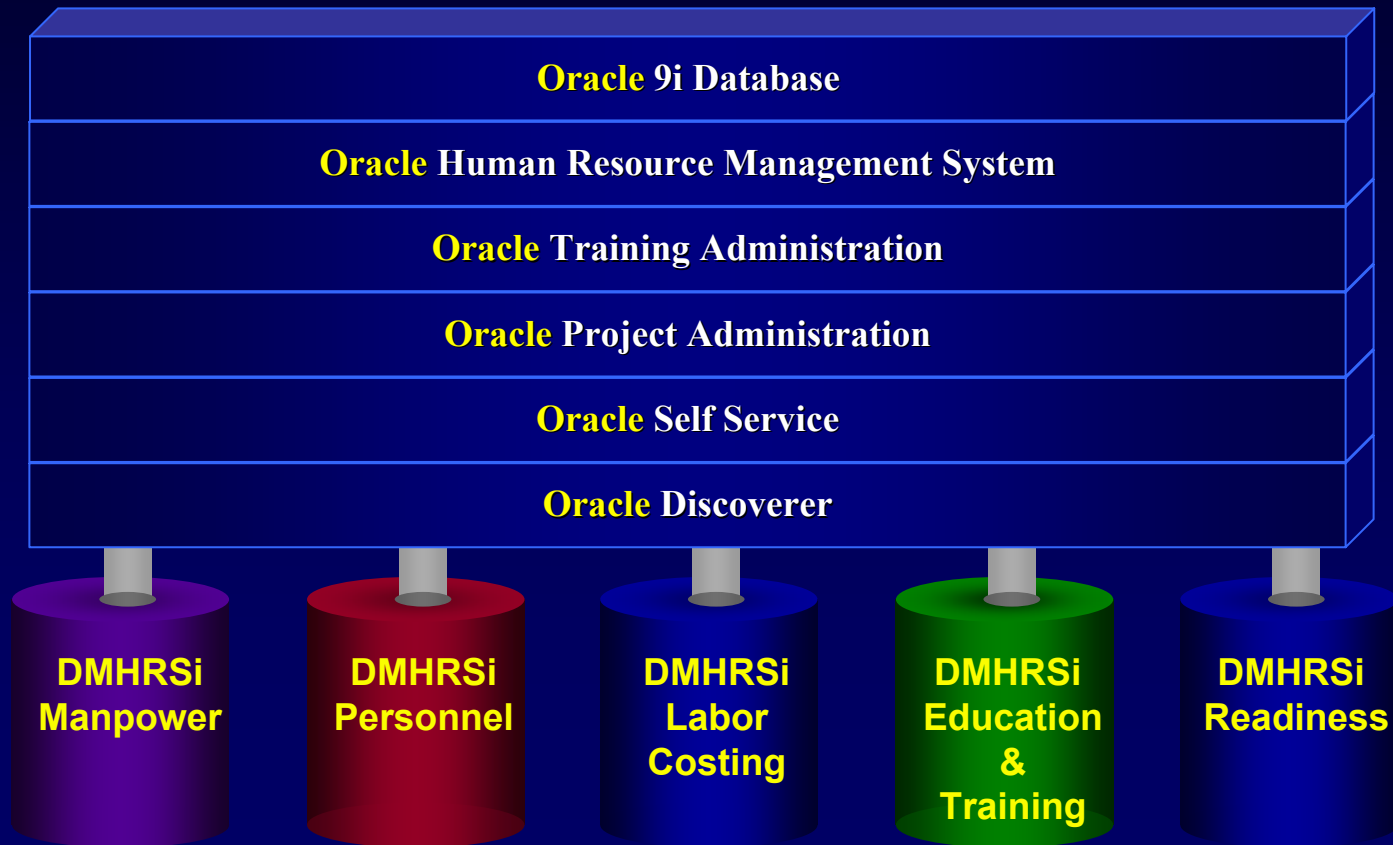


Users

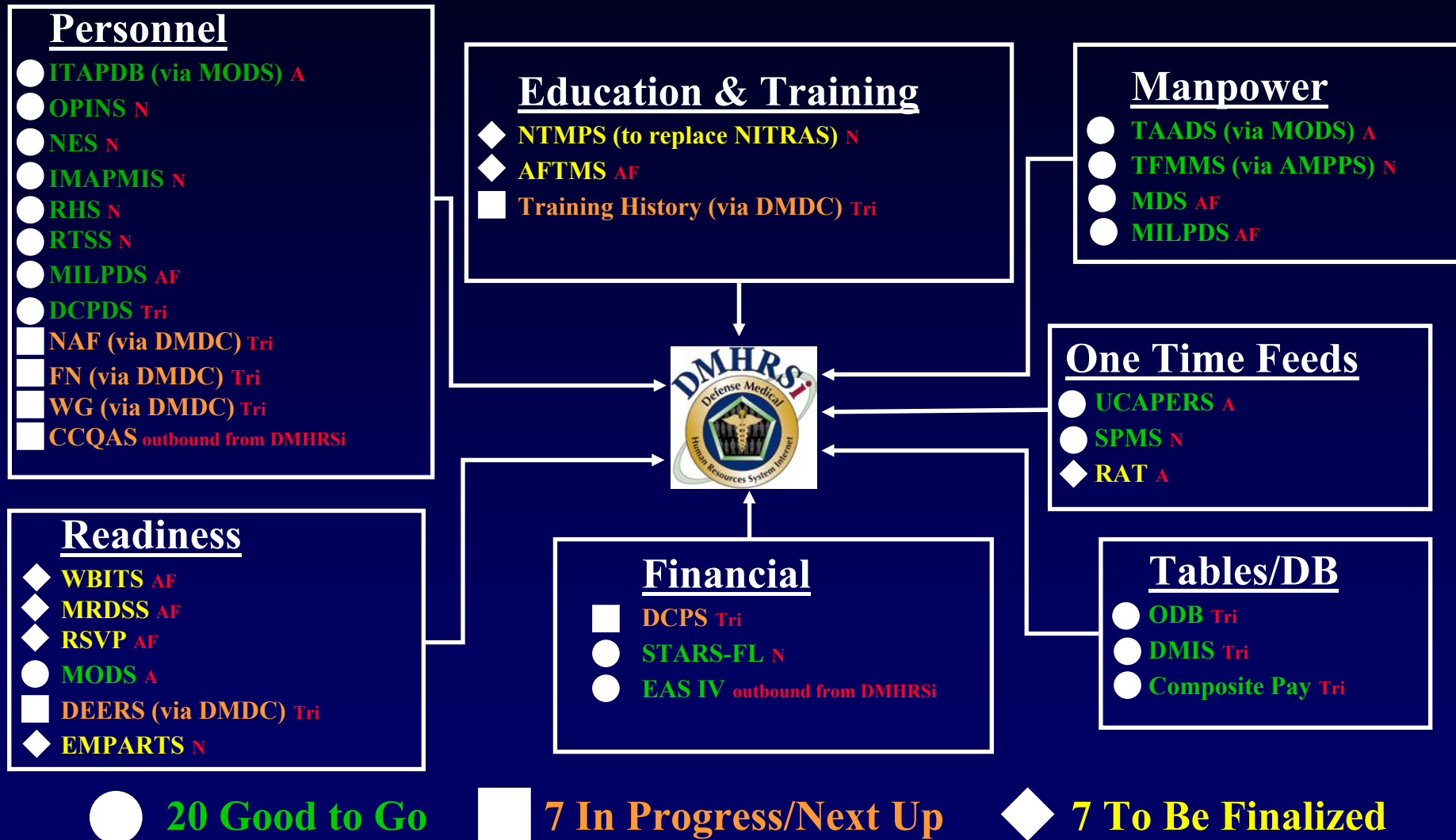


# The DMHR*Si* COTS Solution

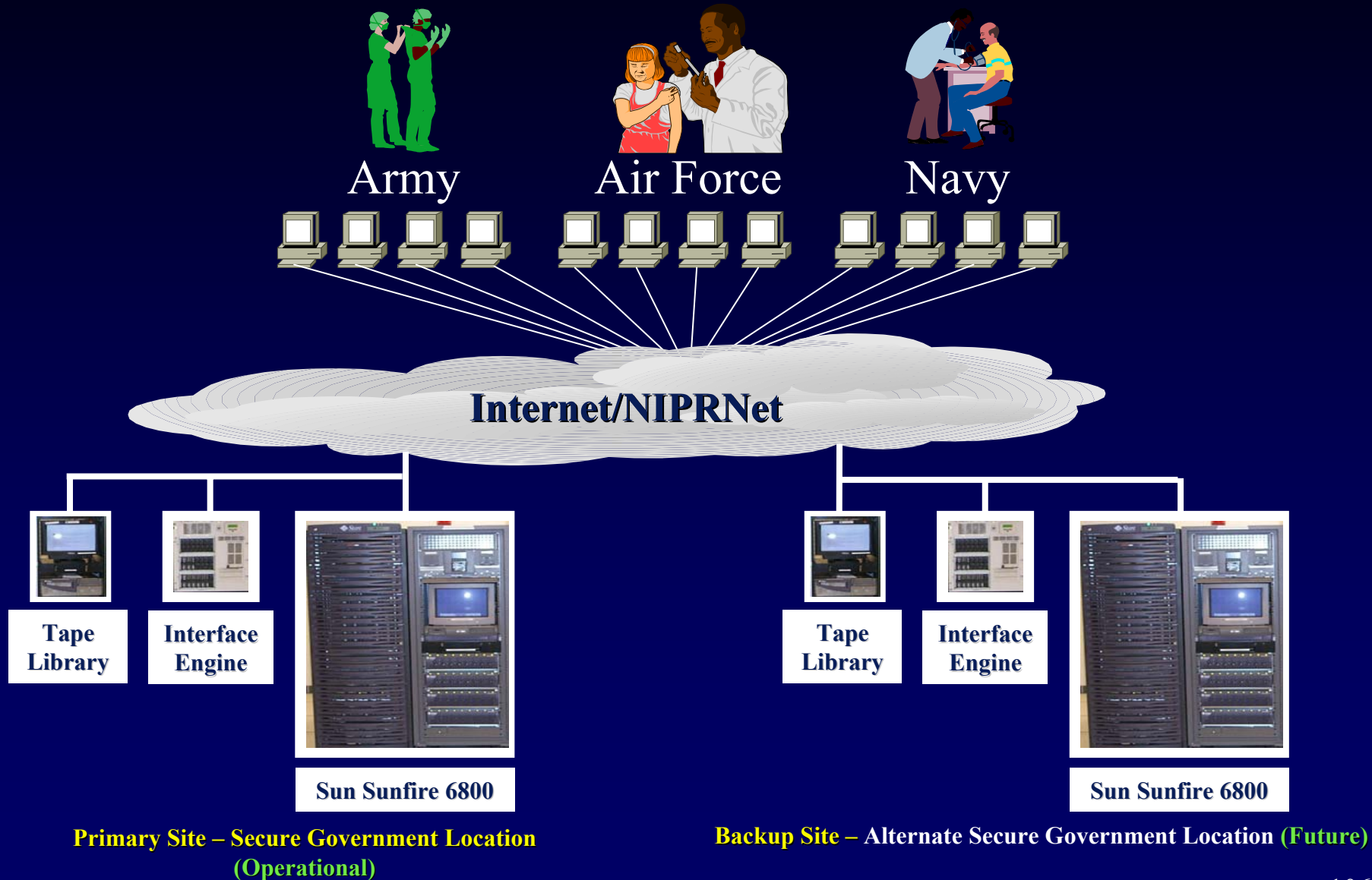
## The Oracle 11i e-Business Suite



# Data Feeds



# DMHRS*i* Architecture Design



# Conclusion

- **Standardizes the management and readiness reporting of medical human resource assets**
- **Provides medical personnel asset visibility for improved decision making**
- **Incorporates industry best practices through the integration of a commercial application**
- **Serves as a cornerstone for other key resource systems (Enterprise Wide Scheduling, Enterprise Wide Provider Database, Enterprise Wide Workload Forecasting)**
- **Current success result of Service collaboration and cooperation**

***“Put the right person, in the right place,  
at the right time, with the right skills”***





# Military Health System

*TIMPO's Communications and Computing  
Infrastructure (C&CI) Role*

*For EWS&R Industry Day*

*Richard Foster  
CAPT, MSC, USN  
Director, TIMPO*





# TIMPO Mission

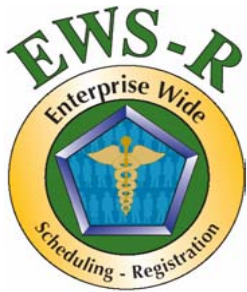


*“Plan, program, acquire, implement and sustain peacetime information technology infrastructure and provide support services for MHS centrally managed products to improve and maintain the health of Military Health System beneficiaries”*



# C&CI – Key Definitions

- **Communications & Computing Infrastructure (C&CI)**
  - Shared computing infrastructure components (servers, storage, operating systems, infrastructure services, application services)
  - Shared communications infrastructure (LANs, WANs)
  - Builds on Global Information Grid (GIG) and DII COE concepts
  - Focus is on an environment that fosters re-use, sharing, and interoperability at all layers
- **TIMPO is all about sharing and eliminating stovepipe systems**



Users See

Applications

TIMPO Provides

Computing  
Centers

Performance  
measurement

Network  
Protection

WAN  
COI

EUDs

Maintenance/  
Sparing

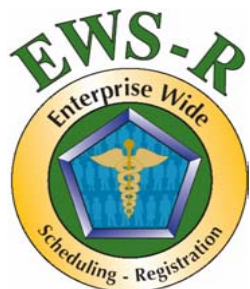
Capacity  
Planning

LAN  
Specialist

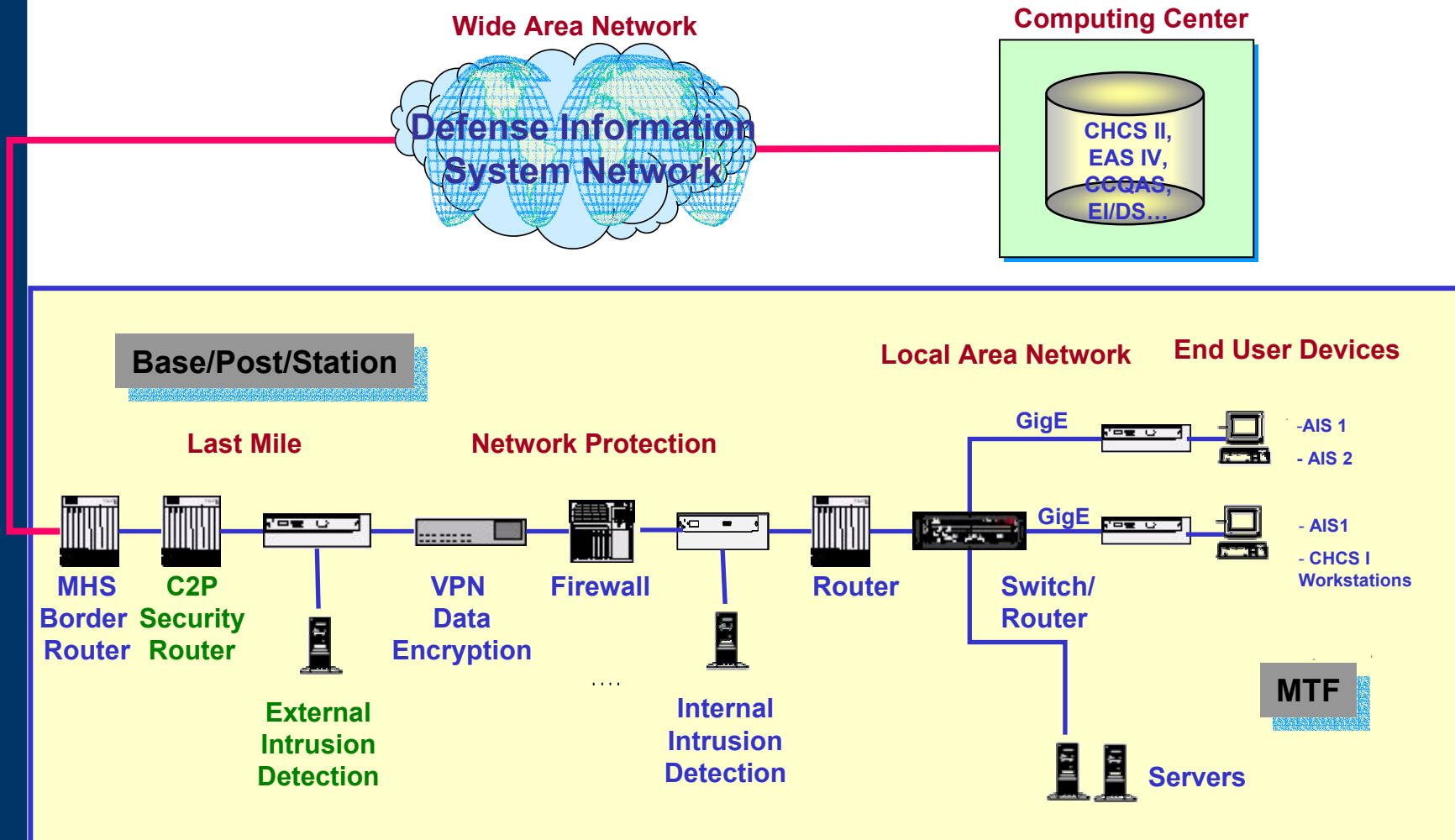
Help  
Desk

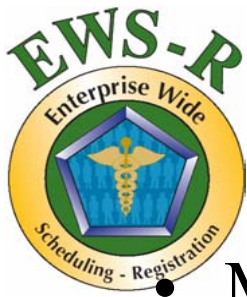
LAN

Network  
Support



# Communications and Computing Infrastructure (C&CI) Target

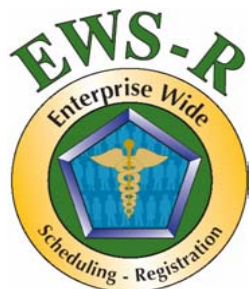




# Standards and Processes



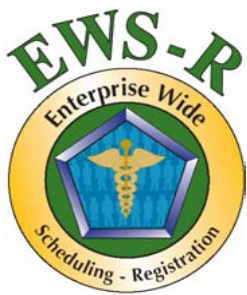
- MHS Minimum Workstation Standard
  - [www.tricare.osd.mil/policy/tma02/020725.pdf](http://www.tricare.osd.mil/policy/tma02/020725.pdf)
- Compliance with Industry Interface Standards (e.g. HL-7, X.12, etc.)
  - [www.HL7.org](http://www.HL7.org)
  - [www.X12.org](http://www.X12.org)
- Compatibility with the MHS Communications & Computing Infrastructure
- Integrate Tier 3 support with MHS Help Desk Operations
- Participate in Integrated Product Teams (IPT) & Configuration Control Boards (CCB)



# Three Year View



	FY02				FY03				FY04			
	1	2	3	4	1	2	3	4	1	2	3	4
<b>Surveys &amp; Designs</b> EUDs, LANs			Surveys (Regions AK, 4,7,8,1)				Surveys (Regions 5,12,15,EU,PAC)					
			Designs (Regions AK, 4,7,8,1)				Designs (Regions 5,12,15,EU,PAC)					
<b>Installation</b> LANs, EUDs			LANs (Regions 2,11,6, 3, 9, 10, Bliss and 4(N), Whiteman and Moody)				LANs (Regions AK, 4, 7, 8,1, 5,12)				LANs (Regions 15,EU,PAC)	
				EUDs (2, 6,9,,11, Bliss)			EUDs (Regions 10,AK,3,4,7, and 8)				EUDs (Regions 1,5,12,EU,PAC)	
			Sustainment				Sustainment				Sustainment	
<b>Installation</b> WAN		General Purpose ATM (8 MTFs)		CHCS II PVC (2,6, 11, Bliss)			CHCS II PVC (Regions 9,10,AK,3,4,7, and 8)				CHCS II PVC (Regions 1,5,12,EU,PAC)	
			Sustainment (66 MTFs)				Sustainment (74 MTFs)				Sustainment (74 MTFs)	
<b>Design &amp; Installation</b> Network Protection	Deployment (2 Army, 1 Navy)		OCONUS Deployment (5 Army/ 9 Navy sites)									
			Sustainment (35 Army, 29 Navy)				Sustainment (35Army, 29 Navy)				Sustainment (35 Army, 29 Navy)	
			Air Force CONUS/OCONUS Requirements (Site list/architecture being developed by AF)									
<b>Circuits</b>			Sustainment				Sustainment				Sustainment	

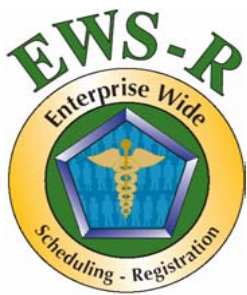


# AVOID



- Proprietary User Devices,
  - instead plan for operations on common multi-use workstations
- Proprietary/Dedicated communications paths
  - instead plan for operating on multi-purpose Ethernet TCP/IP standard LAN Infrastructure
- Proprietary Remote Management/Access to MTF-based Systems

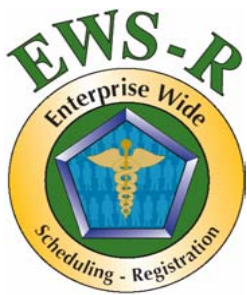




# Commercial Off-The-Shelf (COTS) Considerations



- Accept DoD input/influence in COTS Baseline
  - Not a DoD specific baseline of the COTS product
  - Ensure DoD customers get the benefit of changes needed by all users of the product
- Able to co-host on Common Computing Infrastructure (e.g. Shared Servers, SANs, NAS), thereby eliminating “Stovepipe” technologies
- Publish/share Interface Control Documents and APIs
- Enterprise Scalability
  - e.g. must accommodate the latency inherent in a global enterprise



# COTS Considerations (cont'd)



- Standards and HIPAA compliant
- Network Resource Requirements
  - Bandwidth & Quality-of-Service
- User Performance Measurement
  - Users' experience measured by response time
  - COTs product already ARM'd **or**
  - Instrumented to allow industry standard arming
- Security
  - Ports and Protocols
  - DITSCAP



# Summary



- Use Industry Standards
- Remain flexible enough to integrate with other COTS & GOTS
- Use common MHS C&CI, including servers, LAN, workstations
- Test the scalability for Enterprise-wide operations vice facility or regional operations



# Questions

- Submit questions electronically via e-mail to:
- Questions accepted until:  
5PM EST, Xxx, 2003
- Official answers will be posted on website: [www.ritpo.ha.osd.mil](http://www.ritpo.ha.osd.mil)